

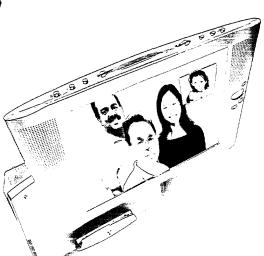
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Multi-Media Display Processors.

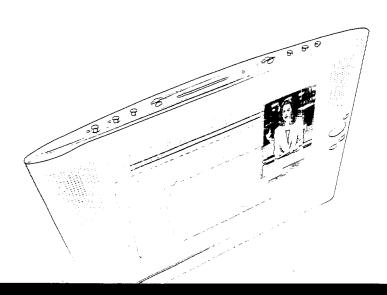






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# 国Tvia





## Letter to the Stockholders:

Our fiscal year (FY) 2002 was eventful and encouraging despite challenging market conditions. We launched an exciting new product—the CyberPro™ 5202 multi-media display processor aimed at advanced TV applications—and nearly tripled our design wins. It was also a time of change for the company. In November, Eli Porat accepted a more active role at Tvia and transitioned from being a member of the board of directors to the company's president and chief executive officer. Kenny Liu, who served as Tvia's CEO since 1995, remains chairman of the board of directors. This collaboration has been extremely effective for Tvia in managing our worldwide operations.

As we move into a new fiscal year, we look back with appreciation for our corporate strengths. Tvia's customers and partners are some of the leading companies in display and multi-media technology. These companies take advantage of the powerful capabilities of our multi-media display processors, including superb alpha-blending features aimed at enriching the viewer's experience. The cost advantage of our facility in Hefei, China, allows us to better serve our customers, many of whom are based in Asia Pacific. By transferring operations to our Hefei facility in April 2002, we were able to reduce our non-China workforce by 23%, and become more financially efficient. Now, as we move into FY 2003, we intend to use these strengths to further develop our business and our company.

Because of the tremendous technological advantages our products represent, and the growing number of applications for advanced TV and emerging display technologies, we were able to achieve 55 design wins during FY 2002. Our goal is to increase our product line, and to capture even more opportunities in Asia Pacific and around the world. We have already made significant progress. As this annual report goes to print, our CyberPro5202 is being evaluated in fourteen customer designs, we have announced another new product—the CyberPro5600 for LCD displays and we are in the advanced design phase of a third new multi-media display processor.

Looking forward, we are establishing a bold, new management philosophy which we believe will inspire greater achievements and cultivate leadership within the company's ranks. By actively seeking and rewarding co-workers who not only share the company's vision, but also have consistently exceeded expectations, we hope Tvia will solidify its position as a leader in multi-media display processors.

We would like to thank our management for their sage leadership, our employees for their dedication and hard work, and you, our stockholders, for your continued support.

Sincerely,

Kenny Liu

Tul

Chairman

Eli Porat

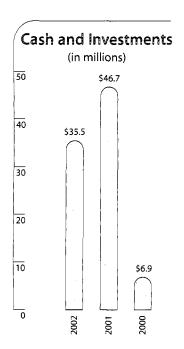
President and CEO

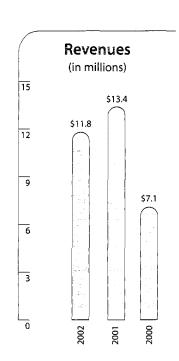
## **Tvia Selected Consolidated Financial Data**

## **Five Year Summary**

(in thousands, except for share amounts)

Year Ended March 31,	2002	2001	2000	1999	1998
Consolidated Statement					
of Operations Data:					
Revenues	\$ 11,840	\$ 13,444	\$ 7,057	\$ 1,522	\$ 3,458
Gross profit	3,209	5,726	3,250	214	474
Operating loss	(16,083)	(9,444)	(5,009)	(5,207)	(4,928)
Net loss	(14,265)	(8,470)	(6,041)	(5,671)	(5,002)
Net loss attributable to common stockholders	(14,265)	(9,141)	(8,202)	(5,671)	(5,002)
Basic and diluted net loss attributable to					
common stockholders:					
Net loss before extraordinary item	\$ (0.66)	\$ (0.56)	\$ (2.63)	\$ (2.56)	\$ (2.32)
Extraordinary item		0.05			
Net loss attributable to common stockholders	\$ (0.66)	\$ (0.61)	\$ (2.63)	\$ (2.56)	\$ (2.32)
Consolidated Balance Sheet Data:					
Cash and cash equivalents, restricted cash					
and short-term investments	\$ 35,505	\$ 46,682	\$ 6,864		\$ 8
Working capital (deficit)	35,979	50,305	5,915	(3,476)	(2,439)
Total assets	43,387	57,435	11,368	730	1,795
Long-term debt			2,959		
Redeemable convertible preferred stock			16,594	9,704	5,212
Stockholders' equity (deficit)	40,925	53,422	(14,266)	(12,978)	(7,326)





# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

## Form 10-K

☑ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended March 31, 2002

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

to

Commission File Number: 0-30539

## Tvia, Inc.

(Exact name of registrant as specified in its charter)

#### Delaware

(State or other jurisdiction of incorporation or organization)

#### 77-0549628

(IRS Employer Identification No.)

#### 4001 Burton Drive, Santa Clara, California 95054

(Address of principal executive offices)

(408) 982-8588

(Registrant's telephone number, including area code)

Securities registered to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act: Common Stock, par value \$0.001 per share

Indicate by check mark whether the registrant (1) has filed all reports required by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  $\square$  No  $\square$ 

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. □

The aggregate market value of Common Stock held by non-affiliates (based upon the closing sale price on the Nasdaq National Market on May 31, 2002 was approximately \$18,403,804.

As of May 31, 2002, there were 22,160,519 shares of Common Stock, \$0.001 per share par value, outstanding.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

Items 10 (as to directors and Section 16(a) Beneficial Ownership Reporting Compliance), 11, 12 and 13 of Part III incorporate by reference information from the registrant's proxy statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for the registrant's 2002 Annual Meeting of Stockholders to be held on August 20, 2002.

## TVIA, INC. AND SUBSIDIARY

## 2002 FORM 10-K

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#### Item 1. Business

When used in this Report, the words "expects," "anticipates," "estimates," "believes," "plans," and similar expressions are intended to identify forward-looking statements. These are statements that relate to future periods and include statements as to the Company's anticipated revenues, expenses, gross profit and loss; the features, performance, advantages and anticipated benefits of our products, including easy software upgrades and integration of new features and technologies, the importance of customer support, the expertise, industry knowledge and capabilities of our sales and marketing staff, our design support, the importance of design support, continued expenditures on research and development, our ability to migrate to smaller process geometries, the key competitive factors in our target markets, our ability to compete, increasing competition in our markets, sources of competition, our intellectual property, strategy, our ability to protect our intellectual property, our backlog as an indicator of future revenues, the status of our relations with our employees, the adequacy of our existing facilities, our dividend policy and our planned retention of our future earnings. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. These risks and uncertainties include, but are not limited to, those risks discussed below, as well as risks related to slower than anticipated emergence of the interactive television market; general economic conditions and specific conditions in the markets we address; the timing, rescheduling or cancellation of significant customer orders; the loss of a key customer, our ability to specify, develop or acquire, complete, introduce, market and transition to volume production new products and technologies in a timely manner; the volume of our product sales and pricing concessions on volume sales; the qualification, availability and pricing of competing products and technologies and the resulting effects on sales and pricing of our products; the availability and pricing of foundry and assembly capacity and raw materials; insufficient customer support; fluctuations in the manufacturing yields of our third party semiconductor foundries and other problems or delays in the fabrication, assembly, testing or delivery of our products; problems or delays that we may face in shifting our products to smaller geometry process technologies and in achieving higher levels of design integration; the effects of new and emerging technologies; the risks and uncertainties associated with our international operations; changes in our products or customer mix; the risk that excess inventory may result in write-offs, price erosion and decreased demand; the level of orders received that can be shipped in a fiscal quarter; and the risks set forth below under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Factors That May Affect Results." These forward-looking statements speak only as of the date hereof. The Company expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

All references to "Tvia," "we," "us," "our" or the "Company" mean Tvia, Inc. and its subsidiary, except where it is made clear that the term means only the parent company.

We own various trademarks and trade names used in our business. These include CyberPro, FlexiBus, Tvia and the Tvia logo. Other trademarks referenced herein are the property of their respective owners.

#### Overview

We design, develop and market multi-media display processors for the advanced television and emerging display markets. Our multi-media display processors accept video, graphics and audio signals from terrestrial broadcast, narrow band telephone lines, cable, satellite and the Ethernet and blend them together on one or more displays for a high quality, customized and interactive viewing experience.

Our multi-media display processors are compatible with various microprocessors, operating systems and applications software. Our products are programmable and customizable and we believe our products also allow easy software upgrades. Our processors, software and reference designs enable our original equipment manufacturers, or OEMs, to accelerate their time to market by reducing their systems engineering development.

#### **Industry Background**

In recent years there has been an increase in demand for high speed access to information and entertainment, or rich media content, which combines audio, video, voice, text, graphics, pictures and animation. This demand is driven by the growth of rich media content available from the Internet and through television broadcasts and accessible via phone lines and via broadband transmission pipes including television antenna (analog or digital broadcast), cable, microwave, satellite, digital subscriber line, or DSL, and Ethernet connection. Demand has also been stimulated by the increasing availability, affordability and ease of use of consumer appliances and other devices that feature integrated Internet access.

Rich media content is available through a variety of devices including advanced television and emerging interactive display devices. Advanced televisions are televisions where a digital or analog signal is processed digitally and enhanced with resolutions ranging from standard resolution to high definition television, or HDTV. Emerging display devices include any kind of consumer electronics device that has expanded interaction functionality, such as set-top boxes, mobile web access appliances, personal video recorders and home gateway systems. Included in this category are broadband set-top boxes which permit consumer access to high-speed networks through broadband transmission pipes.

As rich media content becomes more pervasive, users are demanding faster access to the Internet. In an effort to meet demand for faster access to rich media content, the communications industry has begun to deploy new broadband access technologies that can deliver data at a rate of tens of megabits per second, or up to 700 times faster than today's 56 kilobits per second, or Kbps, dial up modems. Users of dial up analog modems over standard telephone lines with maximum transmission rates of 56 Kbps often experience lengthy delays, failure of transmission and limitations on the volume of data that can be transmitted in real time. The slow speed of the telephone modem is frustrating to mainstream consumers who are accustomed to the immediate point and click interface of a television remote control. These customers may find the speed of broadband connections more satisfying.

The television is the consumer product that people are most comfortable with using for entertainment and information due to its sound and display qualities. Advanced televisions and emerging interactive displays can now act as the medium to access the Internet and traditional television broadcasts, and combine the rich media content and services for an interactive television experience.

Interactive television includes features such as electronic program guides, which enable a consumer to select both categories and specific movies and programs, such as those on video on demand, or VOD, and subscription video on demand, or SVOD, services. Interactive television also enables the consumer to view trailer clips of different movies and programs offered by such services. Interactive television enables consumers to watch a commercial and access, at the click of a button, additional information coming from the Internet or an interactive program. This information, such as an e-commerce website, could be displayed on a transparent window that would allow the consumer to continue viewing the commercial, access additional information and complete the purchase of advertised merchandise. Alternatively, a consumer could be watching a television program while chatting, emailing or instant messaging with friends. In addition, interactive television users could access selected additional information such as personalized stock quotes. Consumers could also play along with a game show and win prizes if they respond faster and more accurately than the contestants on television, or they could compete against other online players. This could be done by providing discrete windows for the interactive content and the main program, or by providing transparent windows that overlay the main program without obstructing it. Interactive content windows could be customized and configured, allowing the consumer to control the viewing experience.

#### Our Solution

Our multi-media display processors allow the consumer to customize the appearance of the display and manipulate multiple content streams to create an enriched and interactive viewing experience. We believe our multi-media display processors offer the following advantages:

- High Performance Processing of Rich Media Content. Our solutions act as a gateway that processes multiple streams of rich media content that converge from different transmission pipes and format standards enabling a high quality, clear display. With the advent of digital transmission, the convergence of multiple rich media content streams transported by the broadband network requires a process to unify and match the multiple transmission standards. For example, some of the broadcast streams are formatted with different resolution and screen size dimensions than Internet streams, thereby resulting in a distorted picture. Our technology converts these varying streams into a uniform stream and delivers an undistorted, high quality picture. The streams are then merged and blended to offer visual effects such as picture in picture, or transparency or the overlay of multiple content types, all enhancing the consumer's viewing experience. In order to support real time processing of multiple streams, our processor provides high bandwidth with some internal data rates exceeding six gigabits per second.
- Support for Multiple Data Types, Transmission Pipes, Microprocessors, Operating Systems and Applications Software. Our multi-media display processors can accept any standard rich media content input signals through standard telephone lines and any broadband transmission pipes. Further, our products are designed with a flexible architecture that can work with most television formats and display types. These modules have been successfully ported to multiple platforms based on industry standard microprocessors, operating systems and content application software. Our focus on compatibility gives our OEM customers flexibility in design and allows devices using our solution to work with the end-users' existing equipment.
- Upgradeable Platform. Our applications software provides advanced television and emerging interactive display manufacturers with a platform that can be expanded and upgraded over time by the consumer with only a software change, which can be downloaded over a network. We believe this helps to reduce the risk of product obsolescence and enables the integration of new features and technologies as they are developed.
- Programmable and Customizable Platform. Our multi-media display processors are programmable and allow manufacturers to add new features and customize the on screen user interface of their products. For example, manufacturers may program their advanced television or emerging interactive display to allow varying modes of transparency, multiple independent media window displays, multiple or combined audio streams, multiple display sizes and multiple horizontal and vertical resolutions and screen refresh rates, which affect the quality of the image and the amount of flicker on the screen.
- Accelerated Time to Market. We believe our multi-media display processors, software and reference designs enable our OEM customers to accelerate their time to market by reducing their systems engineering development. We have developed a number of platforms running with multiple microprocessors, operating systems and applications software which enable our customers to leverage these predeveloped hardware and software platforms to reduce their system engineering efforts. Our software development kits include modules that enable rapid customization and porting, which allow our customers to speed up their product development time. Our engineers work closely with our customers' engineers to facilitate systems design. These benefits enable our OEM customers to bring products with rich features and differentiated systems to market quickly.

#### Products

Our products are based on advanced architecture integrated circuits and system designs that provide real time, cost effective and high quality display processing. We currently offer three product families: the CyberPro 5202 family, introduced in calendar year 2002; the CyberPro 5300 family, introduced in calendar

year 1999; and the CyberPro 5000 family, introduced in calendar year 1998. Our semiconductor solutions include different features, which OEMs can select for inclusion in their products.

The CyberPro 5202 incorporates all the features of our CyberPro 5000, 5005, 5050 and 5055 products. In addition, a 24-bit digital interface directly supports liquid crystal displays; or LCD, and other digital interfaces. Enhanced, flexible alpha-blending capabilities allow overlay of different windows with programmable levels of opacity. Two advanced television encoders allow the user to configure the recording picture in personal video recorder, or PVR, applications. The processor maintains crisp text presentation, even as the opacity of the window is varied. The CyberPro 5202 is designed for displays to multiple devices such as traditional cathode ray tube televisions, advanced televisions, panel displays, emerging interactive displays and LCD products.

The CyberPro 5300 is the first product in the CyberPro 5300 family designed for broadband set-top boxes that require 3D animation, 3D effects or 3D graphics processing capability.

The CyberPro 5305, 5350 and 5355 are similar to our CyberPro 5005, 5050 and 5055 products, but also provide 3D animation, 3D effects or 3D graphics processing capability.

The CyberPro 5000 is the first product of the CyberPro 5000 family designed for broadband digital set-top boxes and advanced televisions. The CyberPro 5000 has enhanced text, graphics and video processing engines. It also includes two video ports for two simultaneous video streams, high picture quality of broadband video on television, hardware magnified view of web pages on television, and a flexible transparency algorithm for blending multiple video, text, graphics, pictures and animation on screen.

The CyberPro 5005 is designed for broadband set-top boxes and advanced televisions with Internet and DVD capability. In addition to CyberPro 5000 features, the 5005 provides MacroVision encryption for copy protection.

The CyberPro 5050 is designed for broadband set-top boxes and advanced televisions that have integrated audio capability. Additional features include an audio digital signal processor engine with audio synthesis, MIDI, I2S, PCM and stereo audio.

The CyberPro 5055 combines all of the features of our CyberPro 5000, 5005 and 5050 products. The CyberPro 5055 provides a solution for broadband set-top boxes and advanced televisions that process multiple media streams including DVD and full duplex audio.

#### Software

Our software products and services are divided into three categories: software development kits, applications modules and custom software services. Our product strategy is based on providing OEMs a complete hardware and software solution, which we believe reduces both the OEMs' system engineering time and their time to market. Our multi-media display solutions are configurable and flexible, and our software is key in enabling our customers to take advantage of this flexibility. Finally, our software modules enable us to provide our OEM customers with the capability to offer systems with differentiated features that enhance the television experience.

Our software development kits are a set of software modules designed to be easily and quickly ported on multiple hardware and software platforms. These kits are modularized in order to cater to different system requirements while minimizing the size of the software code. These modules have been successfully ported to multiple platforms based on industry standard microprocessors, operating systems and content application software.

Finally, by leveraging the comprehensive experience of our software design team, we provide custom software development for customers using our semiconductors.

#### Customers

We target customers in the advanced television and emerging interactive display markets. We began to focus on the emerging interactive display market in 1997, and later expanded our focus to include the

advanced television markets. The majority of our sales in fiscal 2002 were to the broadband set-top box market portion of the emerging interactive display market, primarily for video-on-demand applications. In prior years, the majority of our sales were to the emerging interactive display market. Many of our customers manufacture or distribute products in more than one of our target markets.

In fiscal 2002, sales to Prediwave Corporation and Motorola Broadband, both OEMs, accounted for 62% and 14% of revenues, respectively. In fiscal 2001, sales to Prediwave Corporation, Kanematsu Semiconductor Corp. and Weikeng Industrial Co., Ltd., two of our distributors, accounted for 12%, 12% and 10% of revenues, respectively. In fiscal 2000, sales to Weikeng Industrial Co., Ltd., and Yao Wei, an OEM, accounted for 16% and 12% of revenues, respectively.

In fiscal 2002, sales to customers in the United States and Taiwan comprised 68% and 22% of revenues, respectively. In fiscal 2001, sales to customers in Taiwan, the United States, Japan and Europe comprised 34%, 33%, 11% and 11% of revenues, respectively. In fiscal 2000, sales to customers in Taiwan, the United States and Korea comprised 41%, 29% and 12% of revenues, respectively.

#### Sales and Marketing

We sell and market our multi-media display processors through our direct sales force, sales representatives and distributors. For our software products, we also use value added resellers and system integrators that package and use our software products for resale as standard products or custom software development services.

Our products are marketed primarily through reference platforms and evaluation kits designed internally and with industry leading microprocessors, real time operating systems and other strategic partners directly or indirectly through our partners' channels to OEMs for evaluation and development. These reference platforms and evaluation kits (hardware and software) have proven to be vital to our success in obtaining new design wins. We also promote our products through our website, trade shows, articles, press releases and joint promotions with our strategic partners.

Our personnel work closely with customers, sales representatives and authorized distributors to define product features, performance, price and market timing of new products. We provide technical support and design assistance directly to OEM customers, regardless of the sales channels used. We believe that a high level of customer support is necessary to successfully develop and maintain long-term relationships with our customers. These relationships begin at the design in phase and develop, as customer needs change and evolve. We provide support through both on site customer service and remote support from our facilities.

As of March 31, 2002, we employed a sales and marketing force of 19 people. We believe these personnel have the technical expertise and industry knowledge necessary to support a lengthy and complex sales process. We also employed seven field applications engineers that assist customers in designing, testing and qualifying system designs that incorporate our integrated circuits and software products. We believe that the depth and quality of this design support are key to improving our customers' time to market and maintaining a high level of customer satisfaction. Our four direct sales offices are located in Santa Clara, California; Taipei, Taiwan; Hefei, People's Republic of China; and Berkshire, United Kingdom. All of our sales offices except the United Kingdom provide hardware and software applications support.

#### Research and Development

Our research and development efforts are focused on four areas: device architecture and logic design, physical layer design, software development and device testing. As of March 31, 2002, our research and development staff consisted of 276 employees, (59 of whom were located in the United States and 217 of whom were located in the People's Republic of China). Our research and development efforts have centered on architecture design, streaming media processing modes, high-speed digital and mixed signal design and software.

We conduct research and development at our design centers in Santa Clara, California and Hefei, People's Republic of China. Our People's Republic of China facility is located in a science park near Hefei University of Technology, and employee costs are lower than in the San Francisco Bay Area.

Our research and development expenses for fiscal years 2002, 2001 and 2000 were \$12.7 million, \$6.8 million and \$3.4 million, respectively. Research and development expenses consist mainly of personnel and other costs associated with the development of product designs, process technology, software and programming hardware. We anticipate that we will continue to commit substantial resources to research and development in the future.

#### Manufacturing

We have adopted a fabless semiconductor manufacturing model and we outsource all of our semiconductor manufacturing and assembly. This approach allows us to focus our resources on the design, development, testing and marketing of our products and significantly reduces our capital requirements. We develop our designs to be compatible with two foundries, United Manufacturing Corporation, or UMC, and Taiwan Semiconductor Manufacturing Corporation, or TSMC, both of which are located in Hsin Chu, Taiwan. This allows us to shift production from one facility to the other in the event of a capacity constraint at one foundry. We currently use 0.35 micron technology for production of our CyberPro 5000 family, 0.3 micron technology for production of our CyberPro 5202 family.

We internally design and optimize digital and analog cells through our physical layer design group. We believe this allows us to reduce the size of the semiconductor and therefore the cost. This also gives us greater control over the quality and reliability of our multi-media display processors.

Assembly of our devices is performed by Advance Semiconductor Engineering, Inc. in Kaohsiung, Taiwan. We may also use Siliconware Precision Industries Ltd., located in Hsin Chu, Taiwan. Final testing is primarily performed by us at our subsidiary in Hefei, People's Republic of China.

#### Competition

The semiconductor industry in general, and the market for integrated circuits for advanced televisions and emerging interactive displays, in particular, is highly competitive. We believe we can compete favorably in each of the key competitive factors in our target markets. These factors are:

- · functionality;
- · performance;
- · time to market;
- · price;
- · conformity to industry standards;
- · product road maps; and
- · technical support.

Our current and primary competitors in our target markets are ATI Technologies, Inc., Broadcom Corporation, Genesis Microchip, Inc. and Silicon Image, Inc. In addition to these competitors, we expect other major semiconductor manufacturers will enter the market as the advanced television and emerging interactive display markets develop. A number of companies, including International Business Machines Corporation, STMicroelectronics N.V., National Semiconductor, Equator Technologies, Inc., LSI Logic and Philips Electronics N.V., have announced that they are developing or plan to introduce competing products in the advanced television and emerging interactive display markets which could result in significant competition. We expect competition to intensify as current competitors expand their product offerings and new competitors enter the market.

#### Intellectual Property

We rely on a combination of patent, copyright, trademark and trade secret laws and contractual restrictions to establish and protect our intellectual property and proprietary rights that we develop and license from others.

We have filed three applications for United States patents, one of which has been allowed, containing claims covering various aspects of combining digital streams of video and graphics for presentation on an output display and for changing the size of graphic data for presentation on a television output display. We expect to file patent applications as we deem appropriate to protect our technology and products. We cannot be sure that our patent applications will result in the issuance of patents, or that any issued patents will provide commercially significant protection to our technology.

We also license from others certain audio, graphics and semiconductor technology that is incorporated in our semiconductors and certain intellectual property rights. These licenses are perpetual and survive the termination of the agreements under which we obtained such licenses. The protections we receive from others against infringement under the terms of these licensing agreements are limited and we cannot be sure that alternative technology exists.

In June 1997, we entered into an agreement with T-Square Design, Inc., which has proprietary technology that permits incorporation of the audio function onto graphics controller chips. As a result of our agreement, we were granted the right to use this audio technology for graphics/audio integration in our products and to manufacture, distribute and sublicense products using the audio technology.

In March 2000, we entered into a cross license agreement with Innovative Semiconductors, Inc. ("Innovative"), which has developed proprietary semiconductor circuit and logic designs. Pursuant to our agreement, Innovative licensed to us the right to use their proprietary cores to develop and market semiconductors and we licensed to Innovative the right to use and market our cores and test benches with their products.

In July 2000, we entered into an agreement with Hitachi, Ltd., which has developed proprietary technology on system-on-a-chip SH-4 microprocessors ("SH-4"). As a result of our agreement, Hitachi licensed to us the right to use this SH-4 technology for system-on-a-chip integration in our products and to manufacture, distribute and sublicense products using the SH-4 technology. In March 2002, the Company postponed the product related to this technology indefinitely; accordingly, the Company wrote off \$500,000 of license technology related to this SH-4 technology.

In December 2000, we entered into an agreement with Oak Technology, Inc. ("Oak"), which has proprietary 3D graphics technology that permits incorporation of the 3D graphics function onto our chips. As a result of our agreement, we were granted the right to use this 3D graphics technology for 3D graphics integration in our products and to manufacture, distribute and sublicense products using the 3D graphics technology.

In April 2001, we amended the agreement with Oak, in order to license Oak's proprietary MPEG-2 technology that permits the incorporation of MPEG-2 decoding functions onto our chips. As a result of our agreement, we were granted the right to use this MPEG-2 technology for MPEG-2 integration in our products and to manufacture, distribute and sublicense products using the MPEG-2 decoding technology.

We attempt to avoid infringing known proprietary rights of third parties in our product development efforts. It is difficult to proceed with certainty in a rapidly evolving technological environment in which there may be numerous patent applications pending, many of which are confidential when filed, with regard to similar technologies. If our products violate third party proprietary rights, we might not be able to obtain licenses to continue offering these products without substantial reengineering. Efforts to undertake this reengineering might not be successful, licenses might be unavailable on commercially reasonable terms, if at all, and litigation might not be avoided or settled without substantial expense and damage awards.

CyberPro is a registered trademark, and Tvia and FlexiBus are trademarks pending registration of Tvia in the United States. In addition, the Tvia logo is a trademark of Tvia in the United States and other jurisdictions.

#### Backlog

Our sales are made primarily pursuant to standard purchase orders for delivery of products. Due to industry practice which allows customers to cancel or change orders with limited advance notice prior to shipment, we believe that backlog is not a reliable indicator of future revenue levels.

#### History

We were originally incorporated in California as Integraphics Systems, Inc. in March 1993. We changed our name to IGS Technologies in August 1997. In March 2000, we changed our name to Tvia, Inc. In August 2000, we reincorporated into Delaware. Tvia operates in one principal industry segment.

Our subsidiary in Hefei, People's Republic of China, had 282 employees as of March 31, 2002, including 217 employees in research and development. This facility handles our operations and testing, and performs sales and marketing, in addition to research and development activities. Our market focus is centered on the Asia Pacific region, including China, Taiwan, Japan and Korea. We believe our Hefei subsidiary affords a cost effective means for us to develop products and support our extensive hardware and software alliances. Our subsidiary also gives us a presence in the China market.

#### Seasonality

The electronics industry has historically been subject to seasonal and cyclical fluctuations in demand for its products, and this trend may continue in the future. These industry downturns have been, and my continue to be, characterized by diminished product demand, excess manufacturing capacity and subsequent erosion of average selling prices.

#### **Employees**

As of March 31, 2002, we had 382 full time employees including 276 engaged in research and development, 19 engaged in sales and marketing, 63 engaged in manufacturing and 24 engaged in general management and administration activities. Of these employees, 94 work in our Santa Clara facility, 6 work in our Taiwan office and 282 work at our facility in the People's Republic of China. Our employees are not represented by any collective bargaining agreement and we have never experienced a work stoppage. We believe our relations with our employees are good.

#### Item 2. Properties

Our headquarters, which also serves as our principal administrative, selling, marketing, customer support, applications engineering and product development facility, is located in Santa Clara, California, and consists of two buildings of approximately 19,800 square feet under leases that expire in July 2003. We also lease a sales, marketing and customer support office in Taipei, Taiwan of approximately 1,500 square feet under a lease that expires in February 2003 and a building located in Hefei, People's Republic of China of approximately 15,000 square feet under a lease that expires in June 2005 for our research and development operations in China.

We believe our existing facilities are adequate to meet our needs for the near future and that future growth can be accomplished by leasing additional or alternative space on commercially reasonable terms.

#### Item 3. Legal Proceedings

From time to time the Company may be involved in litigation relating to claims arising in the ordinary course of business. As of the date of this filing, we do not believe that any of the legal proceedings pending

against the Company or, to the best of its knowledge, threatened against it, will have a significant adverse effect on our financial position or results of operations.

#### Item 4. Submission of Matters to a Vote of Security Holders

Not applicable.

#### Executive Officers

The executive officers of the Company are as follows:

Kenny Liu, 48, has served as our Chairman of the Board since January 1995, and as Chief Executive Officer from January 1995 to November 2001. From January 1989 to March 1994, Mr. Liu served as Chairman and Chief Executive Officer of OPTi Inc., a manufacturer of core logic chip sets for the personal computer market. Mr. Liu received a B.S. in Electrical Engineering from National Cheng-Kung University in Taiwan, an M.S. in Computer Science from Santa Clara University and an M.S. in Electrical Engineering from Ohio State University.

Eli Porat, 56, has served as our Chief Executive Officer since November 2001 and as a director of our Company since March 2001. From January 1997 to November 2001, Mr. Porat was Chief Executive Officer of OpenGrid, Inc., a mobile business solutions company. From 1991 to 1996, Mr. Porat was Chief Executive Officer of DSP Group, an audio digital signal processing company. From 1972 to 1983, Mr. Porat was with Intel Corporation. Mr. Porat earned a B.S. and M.S. degrees in Electrical Engineering and Computer Science from the University of California, Berkeley.

Michael Hoberg, 50, has served as our Vice president of Finance and Chief Financial Officer since February 2000. From November 1998 to January 2000, Mr. Hoberg served as the Chief Financial Officer of U.S. Cancer Care, Inc., a radiation oncology company. From December 1996 to June 1998, Mr. Hoberg served as Chief Financial Officer of Faroudja, Inc., a manufacturer of video image enhancement products for the television and broadcast markets, and as an advisor to the Chief Executive Officer from July 1998 to November 1998. Mr. Hoberg received a B.B.A. in Accounting from the University of Wisconsin at Madison and is a Certified Public Accountant.

Jhi-Chung Kuo, 49, a cofounder of the Company, has served as our Chief Technology Officer since July 2000. From March 1993 to June 2000, Mr. Kuo served as our Vice President of Engineering. Mr. Kuo received a B.S. in Physics from National Central University in Taiwan and an M.S. in Electrical Engineering from Mississippi State University.

James Tao, 52, has served as Vice President of Worldwide Marketing since March 2002. He joined us in June 1997 as Senior Director of Business Development, and served from November 1999 to March 2002 as Vice President of Business Development. From March 1989 to May 1997, Mr. Tao served as Vice President of Sales and Marketing at Focus Information Systems, a personal computer peripheral product company. Mr. Tao received an M.B.A. in Telecommunication Management from Golden Gate University and an M.S. in Computer Science from the University of Hawaii.

Yee Wong, 49, a cofounder of the Company, has served as our Vice President of Operations since January 1995. From March 1993 to December 1994, Mr. Wong served as our President. Prior to founding the Company, Mr. Wong served as an ASIC Design Manager for Everex Systems, Inc. and Senior Staff Engineer with Intel Corporation. Mr. Wong received a B.S. in Electrical Engineering from National Cheng-Kung University in Taiwan and an M.S. in Electrical Engineering from the University of Michigan.

The Company's key employee is as follows:

Bo Liu, 48, has served as Vice President of Software Development since November 1999. He joined us as Software Manager in June 1993, serving in that position until June 1998. From June 1998 to November 1999, Mr. Liu was our Director of Software Development. Prior to joining us, Mr. Liu held software development positions at both Micronics Computers, Inc. and Oak Technology, Inc. Mr. Liu was a candidate for a Ph.D. in Electrical and Computer Engineering at the University of Wisconsin at Madison and received an M.S. in

Electrical Engineering from Wichita State University and a B.S. in Electrical Engineering from Hefei University of Technology in the People's Republic of China.

#### PART II

#### Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

The Company's common stock, par value \$0.001 ("Common Stock"), is traded on the Nasdaq National Market ("Nasdaq") under the symbol "TVIA." The following table sets forth, for the periods indicated, the range of high and low sales prices for the Common Stock on Nasdaq, since August 8, 2000, the date of the Company's initial public offering, as reported in its consolidated transaction reporting system.

	High	Low
2000 Quarter Ended:		
September 30	\$20.00	\$8.50
December 31	18.25	3.38
2001 Quarter Ended:		
March 31	4.25	1.50
June 30	3.00	1.44
September 30	2.50	1.21
December 31	2.11	.87
2002 Quarter Ended:		
March 31	2.15	1.45

As of May 31, 2002, the Common Stock was held by 340 stockholders of record (not including beneficial holders of stock held in street name). The Company has never declared or paid dividends on its capital stock and does not anticipate paying any dividends in the foreseeable future. The Company currently intends to retain future earnings for the development of its business.

#### Item 6. Selected Consolidated Financial Data

The data set forth below should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 of this Report and the Consolidated Financial Statements and related Notes included in Item 8 of this Report.

#### SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data set forth below with respect to our consolidated statements of operations data for the years ended March 31, 2002, 2001 and 2000, and with respect to our consolidated balance sheets at March 31, 2002 and 2001, are derived from our Consolidated Financial Statements and related Notes which are included in this Form 10-K. The selected consolidated statements of operations data for the years ended March 31, 1999 and 1998 and our consolidated balance sheet data at March 31, 2000, 1999 and 1998 are derived from our audited consolidated financial statements not included in this Form 10-K. The data set forth below should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements and related Notes included in this Form 10-K.

	Year Ended March 31,				
	2002	2001	2000	1999	1998
Consolidated Statements of Operations Date.	(In thousands, except per share data)				
Consolidated Statements of Operations Data: Revenues:					
Product sales	\$ 11,342	\$12,743	\$ 6,528	\$ 1,432	\$ 2,597
Development contracts and other	498	701	529	90	861
Total revenues	11,840	13,444	7,057	1,522	3,458
Cost of revenues:					
Product sales	8,522	7,650	3,622	1,257	2,458
Development contracts and other	109	68	185	51	526
Total cost of revenues	8,631	7,718	3,807	1,308	2,984
Gross profit	3,209	5,726	3,250	214	474
Operating expenses:					
Research and development	12,664	6,774	3,390	3,357	3,199
Sales, general and administrative	5,056	5,695	3,370	2,062	2,203
Amortization of deferred stock compensation	1,572	2,701	1,499	2	
Total operating expenses	19,292	15,170	8,259	5,421	5,402
Operating loss	(16,083)	(9,444)	(5,009)	(5,207)	(4,928)
Other expense (income), net		, ,	, ,	• • •	
Interest income	(1,818)	(2,105)	(49)	(7)	(29)
Interest expense		132	328	173	75
Amortization of debt guarantee debt and other		327	<u>753</u>	298	28
Other expense (income), net	(1,818)	(1,646)	1,032	464	74
Net loss before extraordinary item	(14,265)	(7,798)	(6,041)	(5,671)	(5,002)
Extraordinary item, net of income taxes		672			
Net loss	(14,265)	(8,470)	(6,041)	(5,671)	(5,002)
Dividend related to convertible preferred stock		671	2,161		_
Net loss attributable to common stockholders	\$(14,265)	<u>\$(9,141</u> )	\$(8,202)	\$(5,671)	\$(5,002)
Basic and diluted net loss attributable to common					
stockholders before extraordinary item	\$ (0.66)	<u>\$ (0.56)</u>	<u>\$ (2.63)</u>	<u>\$ (2.56)</u>	<u>\$ (2.32)</u>
Extraordinary item, net of income taxes	<u>\$</u>	\$ 0.05	<u>\$</u>	<u> </u>	<u>\$</u>
Basic and diluted net loss attributable to common	ф (O.CC)	<b>6</b> (0.61)	ф (2.62 <u>)</u>	ф (2.56 <u>)</u>	ф (2.32 <u>)</u>
stockholders	<u>\$ (0.66)</u>	<u>\$ (0.61)</u>	<u>\$ (2.63)</u>	<u>\$ (2.56)</u>	<u>\$ (2.32)</u>
Shares used in computing basic and diluted net					
loss per share to common stockholders before and after extraordinary item	21,631	15,052	3,118	2,219	2,156
and after extraordinary item	=====	=======================================	=======================================	= 4,419	= 2,130

	Year Ended March 31,				
	2002	2001	2000	1999	1998
	(In thousands, except per share data)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents, restricted cash and		. 713			
short-term investments	\$35,505	\$46,682	\$ 6,864	\$	\$ 8
Working capital (deficit)	35,979	50,305	5,915	(3,476)	(2,439)
Total assets	43,387	57,435	11,368	730	1,795
Long term debt	_	_	2,959	_	
Redeemable convertible preferred stock	_		16,594	9,704	5,212
Stockholders' equity (deficit)	40,925	53,422	(14,266)	(12,978)	(7,326)

#### Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of the Company's financial condition and results of operations should be read in conjunction with "Selected Consolidated Financial Data" and the Consolidated Financial Statements and related Notes included elsewhere in this Report.

When used in this discussion, the words "expects," "anticipates," "estimates," and similar expressions are intended to identify forward-looking statements. These statements relate to future periods and include statements as to expected revenues and sources of revenues, decrease in sales to our top customers, reasons for decreased revenues, including the slowdown of the interactive television industry, an inventory correction, delay in customer product introductions and general economic uncertainty, net losses, defects or bugs in our products or software, future profitability, the reasonableness of our accounting assumptions and estimates, factors that may affect our gross margin, the effect of certain accounting principles on our consolidated financial statements, future sales to key customers, the level of export sales, the level of our research and development expense, development of new products, research and development in China, uses and adequacy of our current cash, cash equivalents and short-term investments, the impact of the adoption of accounting pronouncements, reliance on a small number of original equipment manufacturers, future orders of our products, our ability to compete, increasing competition in our markets and our competitors, sales to customers outside of the United States, effect of foreign currency exchange rates, and changes in interest rates, are subject to risks and uncertainties that could cause actual results to differ materially from those projected. These risks and uncertainties include, but are not limited to, those risks discussed below, as well as risks relating to as slower than anticipated emergence of the interactive television market; the effect of the terrorist attacks in the United States and any resulting conflicts or similar events worldwide on our customers' demand of our products; the impact of worldwide events on our operations in China; general economic conditions and specific conditions in the markets we address; dependence on a key customer or OEM; the loss of a key customer; decreases in sales to a key OEM; our ability to specify, develop or acquire, complete, introduce, market and transition to volume production new products and technologies in a timely manner; the volume of our product sales and pricing concessions on volume sales; the qualification, availability and pricing of competing products and technologies and the resulting effects on sales and pricing of our products; fluctuations in the manufacturing yields of our third party semiconductor foundries and other problems or delays in the fabrication, assembly, testing or delivery of our products; purchases of capital assets; changes in our products or customer mix; the risk that excess inventory may result in write-offs, price erosion and decreased demand; the level of orders received that can be shipped in a fiscal quarter; the impact of foreign currency exchange rates; and the matters discussed in "Factors that May Affect Results." These forward-looking statements speak only as of the date hereof. The Company expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with regard thereto or any change in events, conditions or circumstances on which any statement is based.

#### Overview

We design, develop and market multi-media display processors for the advanced television and emerging display markets. Our multi-media display processors accept video, graphics and audio signals from terrestrial broadcast, narrow band telephone lines, cable, satellite and Ethernet and blend them together on one or more displays for a high quality, customized and interactive viewing experience. Sales to customers in our targeted markets accounted for 100% of total revenues in fiscal years 2002 and 2001, and 83% in fiscal 2000.

We currently have three product families: the CyberPro 5202 family, introduced in calendar year 2002, the CyberPro 5300 family, introduced in calendar year 1999, and the CyberPro 5000 family, introduced in calendar year 1998. These product families currently generate most of our revenues. We sell our products through two channels. First, we sell our products directly to original equipment manufacturers, or OEMs, and recognize revenues at the time of shipment to these OEMs. Second, we sell our products to a number of distributors. We defer recognition of revenues for sales to our distributors until they have sold our products to end-users. We also generate revenues from licensing software, which we believe will continue to constitute a small percentage of total revenues in the future.

Approximately 32%, 67% and 71% of our total revenues for the fiscal years ended March 31, 2002, 2001 and 2000, respectively, were derived from customers located outside the United States. All of our revenues to date have been denominated in United States dollars. Historically, a relatively small number of customers and distributors have accounted for a significant portion of our product sales. Our top two customers accounted for 62% and 14% of total revenues in the fiscal year ended March 31, 2002, respectively; however, we anticipate that sales to these two customers in future periods will not be at the level experienced in fiscal 2002 and could be significantly lower than fiscal 2002 levels. Revenues from customers in Taiwan comprised 22% of our revenues for the fiscal year ended March 31, 2002.

Various factors have affected and may continue to affect our gross margin. These factors include, but are not limited to, our product mix, the position of our products in their respective life cycles, yields and the mix of our product sales and development contracts and other revenues. For example, newly introduced products generally have higher average selling prices and generate higher gross margins. Both average selling prices and the related gross margins typically decline over product life cycles due to competitive pressures and volume price agreements. Our gross margin and operating results in the future may continue to fluctuate as a result of these and other factors.

The sales cycle for the test and evaluation of our products can range from three months to nine months or more, with an additional three to nine months or more before an OEM customer commences volume production of equipment incorporating our products, if ever. Due to these lengthy sales cycles, we may experience a delay between incurring operating expenses and inventory costs and the generation of revenues from design wins.

We have sustained losses on a quarterly and annual basis since inception. As of March 31, 2002, we had an accumulated deficit of approximately \$50.3 million. These losses resulted from significant costs incurred in the planning and development of our technology and services and from significant marketing costs. We anticipate lower revenues for at least the next several quarters as compared to the same period in the prior fiscal year. We believe that this is due to a slowdown in the interactive television industry caused by a slower than anticipated emergence of the interactive television market, a general industry inventory correction, delay in customer product introductions in order to incorporate additional third-party features, and general economic uncertainty.

In connection with the grant of stock options to employees, we have recorded stock based compensation related to stock options granted below deemed fair market value cumulatively through March 31, 2002 of approximately \$6.4 million. This amount represents the difference between the exercise price of these stock option grants and the deemed fair value of the common stock at the time of grant. Of the total, we amortized approximately \$5.8 million through March 31, 2002. The remaining \$0.6 million will be amortized over the remaining vesting period of the options, generally four years or less. As a result, the amortization of stock based compensation will impact our reported results of operations through fiscal year 2003.

We have a subsidiary in Hefei, People's Republic of China, which performs final test and research and development, and branch offices in Taipei, Taiwan and Berkshire, United Kingdom, which are primarily engaged in sales efforts.

#### Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements and the reported amounts of net revenue and expenses during the reporting period. We regularly evaluate our estimates and assumptions related to allowances for doubtful accounts, sales returns and allowances, inventory reserves, purchased intangible asset valuations, warranty reserves, and other contingencies. We base our estimates and assumptions on historic experience and on various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. To the extent there are material differences between our estimates and the actual results, our future results of operations will be affected.

We believe the following critical accounting policies, among others, affect the significant judgments and estimates we use in the preparation of our consolidated financial statements:

- Revenues. We recognize revenues from product sales upon shipment to OEMs and end users provided that persuasive evidence of an arrangement exists, the price is fixed, title has transferred, collection of resulting receivables is reasonably assured, there are no customer acceptance requirements, and there are no remaining significant obligations. Reserves for sales returns and allowances are recorded at the time of shipment. Our sales to distributors are made under agreements allowing for returns or credits under certain circumstances. We defer recognition of revenue on sales to distributors until products are resold by the distributor to the end user.
- Warranty. Our products typically carry a one-year warranty. We provide reserves for estimated product warranty costs at the time revenue is recognized. Although we engage in extensive product quality programs and processes, our warranty obligation is affected by product failure rates, use of materials and service delivery costs incurred in correcting a product failure. Should actual product failure rates, use of materials or service delivery costs differ from our estimates, additional warranty reserves could be required, which could reduce gross margins.
- Receivables. We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of customers to make required payments. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances could be required.
- Inventory. We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated realizable value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by management, additional inventory write-downs could be required.
- Impairment of Long-Lived Assets. We evaluate long-lived assets used in operations, including purchased intangible assets, when indicators of impairment, such as reductions in demand or significant economic slowdowns in the semiconductor industry, are present. Reviews are performed to determine whether the carrying value of assets is impaired based on comparison to the undiscounted expected future cash flows. If the comparison indicates that there is impairment, the impaired asset is written down to fair value. Impairment is based on the excess of the carrying amount over the fair value of those assets. Significant management judgment is required in the forecast of future operating results that is used in the preparation of expected discounted cash flows. It is reasonably possible that the estimates of anticipated future net revenue, the remaining estimated economic life of the products and technologies, or both, could differ from those used to assess the recoverability of these assets. In that event, additional impairment charges or shortened useful lives of certain long-live assets could be required.

#### Results of Operations

The following tables set forth, for the periods indicated, certain consolidated statement of operations data reflected as a percentage of revenues. Our results of operations are reported as a single business segment.

	Year Ended March 31,		
	2002	2001	2000
Consolidated Statement of Operations Data:			
Revenues:			
Product sales	96%	95%	93%
Development contracts and other	4	5	
Total revenues	100	<u>100</u>	100
Cost of revenues:			
Product sales	72	57	51
Development contracts and other	1	*****	3
Total cost of revenues	73	_57	54
Gross profit	<u>27</u>	_43	<u>46</u>
Operating expenses:			
Research and development	107	51	48
Sales, general and administrative	43	42	48
Amortization of deferred stock compensation	13	_20	21
Total operating expenses	163	<u>113</u>	117
Operating loss	<u>(136</u> )	<u>(70</u> )	<u>(71</u> )
Other expense (income), net			
Interest income	(15)	(16)	(1)
Interest expense	_	1	5
Amortization of debt guarantee and other		3	<u>11</u>
Other expense (income), net	(15)	<u>(12</u> )	<u>15</u>
Net loss before extraordinary item	(121)	(58)	(86)
Extraordinary item, net of income taxes	_=	5	_=
Net loss	<u>(121</u> )	<u>(63</u> )	(86)
Dividend related to convertible preferred stock		5	30
Net loss attributable to common stockholders	<u>(121</u> )%	<u>(68</u> )%	<u>(116</u> )%

#### Results of Operations for the Fiscal Years Ended March 31, 2002, 2001 and 2000

Revenues. Revenues were \$11.8 million, \$13.4 million and \$7.1 million for the fiscal years ended March 31, 2002, 2001 and 2000, respectively. Revenues decreased by \$1.6 million from fiscal year 2001 to fiscal year 2002, a decrease of 12%. This decrease was primarily due to a slower than anticipated emergence of the interactive television market and general economic conditions in fiscal 2002. Revenues from two customers, Prediwave Corporation and Motorola Broadband accounted for 62% and 14% of total revenues in fiscal year 2002. We anticipate future sales to Prediwave for the foreseeable future will not be at the level achieved in fiscal 2002. Revenues increased by \$6.3 million from fiscal year 2000 to fiscal year 2001, an increase of 91%. This increase in revenues was primarily due to increased sales of our CyberPro 5000 series of semiconductors for the broadband set-top box and emerging interactive displays. Most of our revenues are

from design wins with new OEMs which rely on third-party manufacturers or distributors to provide inventory management and purchasing functions.

Export revenues, consisting primarily of product sales and development contracts to OEMs and distributors in Asia, represented 32%, 67% and 71% of total revenues in fiscal years 2002, 2001 and 2000, respectively. All export revenues are denominated in United States dollars. While export revenues were not a majority of our revenues in fiscal year 2002 due to sales to Prediwave, which is headquartered in California, we believe export sales will represent a majority of our revenues in the foreseeable future.

Gross margin. Gross margin was 27%, 43% and 46% for the fiscal years ended March 31, 2002, 2001 and 2000, respectively. Gross margin decreased from 43% in fiscal 2001 to 27% in fiscal 2002 primarily as a result of inventory charges related to slow moving inventory impacted by the reduced revenues and product transition within our CyberPro 5000 product family and lower revenues over relatively fixed product cost. Gross margin decreased from 46% in fiscal 2000 to 43% in fiscal 2001 primarily as a result of a \$500,000 inventory charge related to quantities of an older product line.

Research and development. Research and development expenses include personnel and other costs associated with the development of product designs, process technology, software and programming hardware. Our research and development expenses reflect our continuing efforts to develop and bring to market innovative and cost effective multi-media display processors that process the rich media content available on the broadband network. Research and development expenses were \$12.7 million, \$6.8 million and \$3.4 million for the fiscal years ended March 31, 2002, 2001 and 2000, respectively. As a percentage of revenues, research and development expenses represented 107%, 51% and 48% for the fiscal years ended March 31, 2002, 2001 and 2000, respectively. The increase in research and development expenses in absolute dollars and as a percentage of revenues from fiscal year 2001 to fiscal year 2002 is primarily attributable to the increase in the number of research and development personnel in both the second half of fiscal year 2001 and fiscal year 2002, higher levels of depreciation resulting from the acquisition of computers, lab equipment, and software, and a \$500,000 write-down of licensed technology. As a consequence of this hiring, we now employ 276 employees in research and development, of which 59 are located in the United States and 217 are located in the People's Republic of China. Our research and development activities in the People's Republic of China provide software and application specific integrated circuit development support to our domestic operations. The costs of our research and development activities in China are substantially lower than the costs of our activities in Santa Clara. The increase in research and development expenses in absolute dollars and as a percentage of revenues from fiscal year 2000 to fiscal year 2001 is primarily attributable to the hiring of 32 additional engineers in Santa Clara, California and the establishment of the research and development operation in the People's Republic of China. In the foreseeable future, we expect research and development expenses in absolute dollars to remain level or decline from fiscal year 2002.

Sales, general and administrative. Sales, general and administrative expenses consist primarily of personnel and other costs associated with the management of our business and with the sale and marketing of our products. Sales, general and administrative expenses were \$5.1 million, \$5.7 million and \$3.4 million for the fiscal years ended March 31, 2002, 2001 and 2000, respectively. As a percentage of revenues, sales, general and administrative expenses were 43%, 42% and 48% for the fiscal years ended March 31, 2002, 2001 and 2000, respectively. The decrease in sales, general and administrative expenses in absolute dollars from fiscal year 2001 to fiscal year 2002 was primarily due to approximately \$350,000 of higher tradeshow marketing expenses incurred in fiscal 2001. The increase in sales, general and administrative expenses in absolute dollars from fiscal year 2000 to fiscal year 2001 was primarily due to increased headcount, including hiring executive officers, expansion of our domestic and international sales force, the building of our general and administrative infrastructure and the Company's participation at trade shows. The decrease in sales, general and administrative expenses as a percentage of revenues from fiscal year 2000 to fiscal year 2001 was primarily attributable to the increase in revenues. In April 2002, the Company reduced its sales, general and administrative expenses, including a reduction in force of certain officers and employees.

Amortization of deferred stock compensation. We grant stock options to hire, motivate and retain employees. We incurred stock compensation expense of \$1.6 million, \$2.7 million and \$1.5 million for the fiscal years ended March 31, 2002, 2001 and 2000, respectively.

Other expense (income), net. Other expense (income), net consists primarily of interest income, interest expense and amortization of guarantee debt costs. Other income, net was \$1.8 million and \$1.6 million for fiscal years 2002 and 2001, respectively, compared to other expense, net of \$1.0 million for the fiscal year ended March 31, 2000. Other income, net, generated in the fiscal years ended March 31, 2002 and 2001 was primarily a result of interest income earned from our investments which increased significantly in fiscal year 2001 as a result of investments made using the proceeds from our initial public offering, and to a lesser extent, the repayment of our outstanding debt, partially offset by amortization of debt guarantee. Other income, net was further offset in fiscal year 2002 by a lower return on our investments and declining levels of amount of cash and investments. Other expense, net, in the fiscal year ended December 31, 2000 consisted mostly of the amortization of deferred interest related to warrants and options issued to guarantors of our debt, and interest expense on this debt.

Provision for income taxes. We are taxed in our jurisdictions of operations based on the extent of taxable income generated in each jurisdiction. For income tax purposes, revenues are attributed to the taxable jurisdiction where the sales transactions generating the revenues were initiated. We incurred operating losses for each of the fiscal years ended March 31, 2002, 2001 and 2000, and therefore made no provision for income tax in these fiscal years. As of March 31, 2002, we had federal and state net cumulative operating losses of approximately \$42.0 million and \$25.0 million, respectively, which are available to offset future taxable income. If not used, these net operating losses will expire through 2022 and 2012, respectively.

Extraordinary item. In August 2000, we used a portion of the proceeds of our initial public offering to repay approximately \$4.0 million of debt that was outstanding at that time. As a result of this early extinguishment of debt, the unamortized portion of the debt guarantee costs was recorded as an extraordinary item, net of income taxes, in the amount of \$0.7 million for the fiscal year ended March 31, 2001.

Preferred stock dividend. During the fiscal years ended March 31, 2001 and 2000, we recorded a preferred stock dividend of \$0.7 million and \$2.2 million, respectively, representing the value of the beneficial conversion feature on the issuance of convertible preferred stock. The beneficial conversion feature was calculated at the commitment date based on the difference between the conversion price of \$3.75 per share and the estimated fair value of the common stock at that date.

#### Liquidity and Capital Resources

During the fiscal year ended March 31, 2002, net cash used in operating activities was \$8.0 million, primarily due to net loss of \$14.3 million, a decrease in accrued liabilities of \$1.1 million, partially offset by non-cash expenses of \$3.2 million and decreases of \$1.8 million and \$2.8 million in accounts receivable and inventories, respectively. During the fiscal year ended March 31, 2001, net cash used in operating activities was \$9.6 million primarily due to net loss of \$8.5 million, increase in inventories of \$3.0 million and increase in other current assets and prepaid expenses of \$1.3 million, partially offset by non-cash expenses of \$4.3 million. During the fiscal year ended March 31, 2000, net cash used in operating activities were \$3.1 million primarily due to net loss of \$6.0 million and an increase in inventories of \$1.0 million, partially offset by non-cash expenses of \$2.9 million and an increase in accounts payable of \$1.2 million.

Purchases of property and equipment were \$2.1 million, \$2.2 million and \$0.2 million for the fiscal years ended March 31, 2002, 2001 and 2000. As of March 31, 2002, we did not have any significant capital expenditure commitments.

Net cash flows from financing activities were \$0.3 million, \$54.7 million and \$7.1 million for the fiscal years ended March 31, 2002, 2001 and 2000, respectively. Net cash flows from financing activities in fiscal 2002 resulted primarily from the proceeds from the sale of common stock under our Employee Stock Purchase Plan. Net cash flows from financing activities in fiscal 2001 resulted primarily from the proceeds from the issuance of common stock in our initial public offering completed in August 2000, the sale of

409,992 shares of Series I convertible preferred stock, and the sale of common stock to Wind River, partially offset by the repayment of outstanding debt and the repurchase of our common stock. Net cash provided by the sale of preferred and common stock was \$7.9 million in the fiscal year ended March 31, 2000. Proceeds from bank lines of credit were \$3.3 million for the fiscal year ended March 31, 2000.

As of March 31, 2002, our principal source of liquidity consisted of cash and cash equivalents and short-term investments. Working capital at March 31, 2002 was \$36.0 million.

The following represent our more significant working capital commitments:

The Company leases its facilities under non-cancelable operating leases expiring at various dates through June 2005. Under the terms of the leases, the Company is responsible for a portion of the facilities' operating expenses, insurance and property taxes. Future minimum lease payments under all non-cancelable facility and operating leases as of March 31, 2002 were as follows (in thousands):

Fiscal Year	Amount
2003	 \$584
2004	 227
2005	 48
2006	 11
	<u>\$870</u>

On November 10, 2001, the Board of Directors authorized a stock repurchase program to acquire outstanding common stock in the open market. Under this program, the Board of Directors authorized the acquisition of up to 200,000 of the Company's common stock. The Company did not acquire any treasury shares during the fiscal year ended March 31, 2002. At the May 31, 2002 stock price, the proceeds to be used to acquire up to 200,000 shares of the Company's common stock will have a minimal impact on the Company's current cash, cash equivalent and short-term investment balances.

The Company places purchase orders with wafer foundries throughout its normal course of business. As of March 31, 2002, the Company had approximately \$268,000 of outstanding purchase commitments with a supplier for the purchase of wafers. The Company expects to receive and pay for the wafers, within the next six months, from its existing cash balances.

Based on our current expectations, we believe that our cash and cash equivalents and short-term investment, which totaled \$35.5 million at March 31, 2002, will be sufficient to meet our working capital and capital requirements through at least the next twelve months. In the fiscal year ended March 31, 2002, we used \$14.8 million of cash and cash equivalents. As a result of anticipated net losses and purchases of capital assets, we anticipate that we will use a slightly lower amount in the fiscal year ending March 31, 2003. We may also utilize cash to acquire or invest in complementary businesses or to obtain the use of complementary technologies.

The following represent our significant related party transactions:

#### Accrued Salary Converted into Preferred Stock or Used to Exercise Options

For the year ended March 31, 2000, the Chairman of the Board of the Company elected to have a portion of his accrued salary forgiven to pay the exercise price of options upon exercise or converted into convertible preferred stock. In the year ended March 31, 2001, the Chairman of the Board elected to receive his compensation in cash. For the year ended March 31, 2000, the Chairman of the Board converted \$244,000 into a subscription for 65,066 shares of Series H redeemable convertible preferred stock at \$3.75 per share and converted \$96,000 upon exercise of options at \$0.12 per share.

#### Option Exchange

In September 2001, the Company implemented option exchanges with the Chairman of the Board of Directors and the former Vice President of Engineering. These officers were given the opportunity to exchange options for a new grant for the same number of shares at least six months and a day after completion of the option exchange. On April 5, 2002, the Company granted these officers new options to replace the eligible options that had been cancelled.

#### Commission and Severance Payments

In the year ended March 31, 2000, the former President of the Company was entitled to receive a 1.75% commission on the amount of third party participation in the issuance of Series I preferred stock. The commission was paid in a combination of shares of common stock and cash of approximately \$56,000. Our former President resigned on January 31, 2002 and received a severance package that included additional salary equal to \$94,000 and an additional six months of vesting for his stock options.

#### Sales to Related Parties

A member of the Board of Directors is an officer of a company which is an affiliate company of a major customer. Sales to this customer were \$127,000, \$43,000 and \$292,000 for the years ended March 31, 2002, 2001 and 2000, respectively.

#### Payments to Related Parties

A former member and a current member of the Board of Directors are officers of companies which are affiliated to the Company's major vendors UMC and TSMC, respectively. Purchases from UMC amounted to \$2,485,000 for the fiscal year ended March 31, 2002. Total combined purchases from UMC and TSMC amounted to \$7,062,000 and \$2,041,000, respectively, for the fiscal years ended March 31, 2001 and 2000, respectively. The accounts payable outstanding to UMC as of March 31, 2002 was \$173,000. The total combined accounts payable outstanding to UMC and TSMC as of March 31, 2001 and 2000 was \$312,000 and \$781,000, respectively.

Another member of the Board of Directors received \$13,000 and \$10,500 in the year ended March 31, 2002 and 2001, respectively, and an option to purchase 25,000 shares of common stock in the year ended March 31, 2001, for providing management consulting services.

#### Inflation

The impact of inflation on our business has not been material for the fiscal years ended March 31, 2002, 2001, and 2000.

#### Recently Issued Accounting Pronouncements

In July 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No. 141 and SFAS No. 142, "Business Combinations" and "Goodwill and Other Intangibles." SFAS No. 141 requires all business combinations initiated after June 30, 2001 to be accounted for using the purchase method. Under SFAS No. 142, goodwill is no longer subject to amortization over its estimated useful life. Rather, goodwill is subject to at least an annual assessment for impairment, applying a fair-value based test. Additionally, an acquired intangible asset should be separately recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if the intangible asset can be sold, transferred, licensed, rented, or exchanged, regardless of the acquirer's intent to do so. Other intangible assets will continue to be valued and amortized over their estimated lives; in-process research and development will continue to be written off immediately. The Company adopted SFAS No.'s 141 and 142 as of April 1, 2002. The adoption of SFAS No. 141 and 142 did not have a material impact on the Company's consolidated financial statements.

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 establishes one accounting model to be used for long-lived assets to be disposed

of by sale, and broadens the presentation of discontinued operations to include more disposal operations. SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of," and the accounting and reporting provisions of APB Opinion No. 30. SFAS No. 144 is effective for fiscal years beginning after December 15, 2001. The Company adopted SFAS No. 144 as of April 1, 2002. The adoption of SFAS No. 144 did not have a material impact on the Company's consolidated financial statements.

On April 30, 2002, the FASB issued Statement No. 145, which rescinds Statement 4, which required all gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, net of related income tax effect. As a result, the criteria in Opinion 30 will now be used to classify those gains and losses. Statement 145 amends Statement 13 to require that certain lease modifications that have economic effects similar to sale-leaseback transactions be accounted for in the same manner as sale-leaseback transactions. The Company has not yet determined the impact that this statement will have on its financial position or results of operations.

#### FACTORS THAT MAY AFFECT RESULTS

## We expect continuing losses and may not achieve profitability which could affect our ability to expand our business.

We have incurred significant operating losses in each year since our inception and expect to continue to incur net losses for the foreseeable future, primarily as a result of expenses for research and development. Our losses increased as we transitioned our focus away from the personal computer market toward the advanced television and emerging interactive display markets in 1996. We have incurred net losses of approximately \$50.3 million from our inception in March 1993 through March 31, 2002. If we continue to incur net losses, we may not be able to expand our business as quickly as we would like. We do not know when or if we will become profitable and if we do become profitable, we may not be able to sustain or increase our profitability.

# Because the emergence of the interactive television market has been slower than anticipated, we may not be able to sell our products or sustain our business.

Our multi-media display processors are incorporated into products that allow interactive television. The concept of interactive television and the market for products that facilitate it are new and developing. As a result, our profit potential is unproven and may never materialize. Broad acceptance of advanced televisions and emerging interactive displays will depend on the extent to which consumers use devices other than personal computers to access the Internet. To date, the market for these products has not developed as quickly as our customers and we had previously anticipated. Consequently, certain of our customers have significant inventory of our semiconductors or products that incorporate our semiconductors, thereby limiting the opportunity to sell additional semiconductors to these customers until their present inventories are depleted. Our success will also depend on the ability of OEMs and service providers that work with our OEMs to create demand for and market the products incorporating our semiconductors. Unless a sufficiently large market for advanced televisions and emerging interactive displays and other products that are used for interactive television develops, demand for products incorporating our semiconductor solutions may not be sufficient to sustain our business.

# A significant amount of our revenues comes from two customers and any decrease in revenues from these customers could significantly impact our financial results.

Historically we have been, and we expect to continue to be, dependent on a relatively small number of OEMs for a significant portion of our total revenues. Sales to Prediwave Corporation and Motorola Broadband, both OEMs, accounted for approximately 62% and 14% of our total revenues for the fiscal year ended March 31, 2002, respectively. For fiscal year ended March 31, 2001 sales to Prediwave Corporation accounted for approximately 12% of our total revenues. We may not be able to retain our two largest customers or to obtain additional key accounts. Prediwave Corporation, our largest customer, has not placed

an order for delivery of our products after fiscal 2002. While we expect that Prediwave Corporation will place orders for additional products, we anticipate that sales to Prediwave Corporation in future periods will not be at the level experienced in fiscal 2002 and will likely be lower. Any reduction or delay in sales of our products to Prediwave or another key customer or our inability to successfully develop relationships with additional key customers could negatively impact our financial results.

Our operating expenses may increase as we build our business and these increased expenses may impact our ability to become profitable.

We have made substantial expenditures on research and development and organizational infrastructure consisting of an executive team, finance, sales, marketing and management information systems departments and our design center located in the People's Republic of China. For the fiscal years ended March 31, 2002, 2001 and 2000, research and development expenses represented 107%, 51% and 48% of our revenues, respectively. We expect to continue to spend substantial financial and other resources on developing and introducing new products and services, and on our research and development activities in China. While we have implemented actions to reduce our operating expenses at our headquarters in Santa Clara, California, our operating expenses may increase as a percentage of revenues if our revenues decline. If our revenues do not increase, our business and results of operations could suffer. We base our expense levels in part on our expectations regarding future revenues. If our revenues for a particular quarter are lower than we expect, we may be unable to proportionately reduce our operating expenses for that quarter.

Customers may cancel or defer significant purchase orders, or our distributors may return our products, which would cause our inventory levels to increase and our revenues to decline.

We sell our products on a purchase order basis through our direct sales channel, sales representatives and distributors, and our customers may cancel or defer purchase orders at any time with little or no penalty. We recognize revenues from sales to our distributors when they have sold our products to their customers. We recognize revenues on sales to our OEM customers when we ship our products to the OEM. We permit certain of our distributors to return products to us. If our customers cancel or defer significant purchase orders or our distributors return our products, our inventories would increase and our revenues would decrease, which would materially harm our business as increases in inventory reserves could be required. Refusal of OEM customers to accept shipped products or delays or difficulties in collecting accounts receivable could have an adverse effect on our business.

Because of our long product development process and sales cycle, we incur substantial expenses before we generate revenues and may not recover our expenditures.

To develop market acceptance of our products, we must dedicate significant resources to research and development, production and sales and marketing. We develop products based on forecasts of demand and we incur substantial product development expenditures prior to generating associated revenues. Our customers typically perform numerous tests and extensively evaluate our products before incorporating them into their systems. The time required for testing, evaluating and designing our products into a customer's equipment can take up to nine months or more, with an additional three to nine months or more before an OEM customer commences volume production of equipment incorporating our products, if ever. Because of this lengthy development cycle, we may experience a delay between the time we accrue expenses for research and development and sales and marketing efforts and the time when we generate revenues, if any.

Furthermore, achieving a design win with a customer does not necessarily mean that this customer will order large volumes of our products. A design win is not a binding commitment by a customer to purchase our products. Rather, it is a decision by a customer to use our products in the design process. In addition, our customers can choose at any time to discontinue using our products in that customer's designs or product development efforts. If our products are chosen to be incorporated into a customer's products, we may still not realize significant revenues from that customer if that customer's products are not commercially successful. As a result, our profitability from quarter to quarter and from year to year may be materially affected by the

number and timing of our new product introductions in any period and the level of acceptance gained by these products.

## If we fail to successfully develop, introduce and sell new products, we may be unable to effectively compete in the future.

We operate in a highly competitive, quickly changing environment marked by new and emerging products and technologies. Our success depends on our ability to develop, introduce and successfully market new products and enhance our existing products in the advanced television and emerging interactive display markets. The development of these new products is highly complex and, from time to time, we have experienced delays in completing their development and introduction. Any one of the following factors could affect our ability to develop, introduce and sell new products and could materially harm our business:

- our failure to complete new product designs in a timely manner;
- our inability to manufacture our new products according to design specifications;
- our inability to deliver our products to our customers in a timely manner for any reason, including a
  lack of manufacturing capacity or the failure of our contracted foundries to meet targeted manufacturing yields; and
- our sales force's and independent distributors' inability to create adequate demand for our products.

# Our future operating results are likely to fluctuate and may fail to meet expectations which could cause our stock price to decline.

Our operating results have varied in the past and are likely to do so in the future as we attempt to meet consumer demand in the markets for advanced televisions and emerging interactive displays. Our future operating results will depend on many factors and may fail to meet our expectations for a number of reasons. Any failure to meet these expectations or those of securities analysts and investors could cause our stock price to fluctuate or decline significantly. A number of factors, including those listed below, may cause fluctuations in our operating results and stock price:

- the general condition of the semiconductor industry market;
- · fluctuations in the volume of product sales, changes in product mix and pricing concessions on sales;
- the timing, rescheduling or cancellation of significant customer orders;
- the timing of investments in, and the results of, research and development;
- · changes in industry standards;
- introduction of interactive television services by service providers;
- availability of manufacturing capacity and raw materials, and inventory write-offs;
- product introductions and price changes by our competitors;
- our ability to specify, develop, introduce and market new products with smaller geometries, more features and higher levels of design integration in accordance with design requirements and design cycles;
- the level of orders received that can be shipped in a given period;
- changes in earning estimates or investment recommendations by analysts;
- changes in investors perceptions; and
- the effect of the terrorist attacks in the United States and any related conflicts or similar events worldwide.

Our industry is highly competitive, and we cannot assure you that we will be able to effectively compete.

The market for advanced televisions and emerging interactive displays in particular, and the semiconductor industry in general, are highly competitive. We compete with a number of domestic and international suppliers of semiconductors in our targeted markets. We expect competition to intensify as current competitors expand their product offerings and new competitors enter our targeted markets. We believe that we must compete on the basis of a variety of factors, including:

- functionality;
- · performance;
- · time to market;
- price;
- · conformity to industry standards;
- · product road maps; and
- technical support.

We currently compete with ATI Technologies, Inc., Broadcom Corporation, Genesis Microchip, Inc. and Silicon Image, Inc. In addition to these competitors, we expect other major semiconductor manufacturers will enter our targeted markets as the broadband set-top box, advanced television and information access device markets become more established. A number of companies, including International Business Machines Corporation, STMicroelectronics N.V., National Semiconductor Corporation, Equator Technologies, Inc., LSI Logic and Philips Electronics N.V., have announced that they are developing or plan to introduce competing products in the advanced television and emerging interactive display markets which could result in significant competition.

Some of our current and potential competitors operate their own fabrication facilities or have a longer operating history and significantly greater financial, sales and marketing resources. They may also have preexisting relationships with our customers or potential customers. As a result, these competitors may be able to adapt more quickly to new or emerging products, develop new technologies, or address changes in customer requirements or devote greater resources to the development and promotion of strategic relationships among themselves or with existing or potential customers. It is possible that new competitors or alliances among competitors could emerge and rapidly acquire significant market share. Increased competition could harm our business, results of operations and financial condition by, for example, increasing pressure on our profit margin or causing us to lose sales opportunities.

We depend on two independent foundries to manufacture our products based on our forecasts, which could result in an oversupply or undersupply of products.

We do not own or operate our own fabrication facility. We currently depend upon two outside foundries, United Manufacturing Corporation, or UMC, and Taiwan Semiconductor Manufacturing Corporation, or TSMC. We do not have long term supply agreements with these foundries to manufacture our semiconductor products. Both of these foundries are located in Taiwan and each has limited manufacturing capacity.

The foundries require us to provide forecasts of our anticipated manufacturing orders in advance of receiving purchase orders from our customers. This may result in product shortages or excess product inventory. Obtaining additional supply in the face of product shortages may be costly or not possible, especially in the short term. Our failure to adequately forecast demand for our products would materially harm our business. For example, in fiscal 2002 we took an inventory charge related to slow moving inventory. The foundries may allocate capacity to the production of other companies' products while reducing delivery to us on short notice.

## We may encounter periods of semiconductor oversupply, resulting in pricing pressure, as well as undersupply, resulting in a risk that we could be unable to fulfill our customers' requirements.

The semiconductor industry has historically been characterized by wide fluctuations in the demand for, and supply of, its products. These fluctuations have resulted in circumstances when supply and demand for the industry's products have been widely out of balance. Our operating results may be materially harmed by industry wide semiconductor oversupply, which could result in severe pricing pressure or inventory writedowns. For example, in fiscal 2002 we took a slow moving inventory charge, which negatively impacted our gross margin for fiscal 2002. On the other hand, in a market with undersupply, we would have to compete with larger companies for limited manufacturing capacity. If material shortages occur, we may incur additional costs to procure the scarce components or be unable to have our products manufactured in a timely manner or in quantities necessary to meet our requirements. Since we outsource all of our manufacturing, we are particularly vulnerable to supply shortages. As a result, we may be unable to fill orders and may lose customers. Any future industry wide oversupply or undersupply of semiconductors would materially harm our business and have a negative impact on our earnings.

# If we have to qualify new independent foundries for any of our products and do not have sufficient supply of our products on hand, we may lose revenues and damage our customer relationships.

Processes used to manufacture our products are complex, customized to our specifications and can only be performed by a limited number of manufacturing facilities. The foundries we use have from time to time experienced lower than anticipated manufacturing yields, particularly in connection with the introduction of new products and the installation and start up of new process technologies. In addition, the foundries we use are located in a seismically active area, and earthquakes have caused these foundries to close for repairs, resulting in a delay in manufacturing our products.

Although we primarily utilize two independent foundries, most of our components are not manufactured at both foundries at any given time. The inability of one of the foundries to provide components could result in significant delays and harm our business. In the event either foundry experienced manufacturing or financial difficulties or suffered any damage or destruction to its facilities, or in the event of any other disruption of foundry capacity, we may not be able to qualify alternative manufacturing sources for existing or new products in a timely manner. For example, in September 1999, Taiwan experienced a major earthquake. The earthquake and its resulting aftershocks caused power outages and significant damage to Taiwan's infrastructure. Similarly, in September 2001, a typhoon hit Taiwan causing businesses in Taipei and the financial markets to close for two days. In addition, as a result of the rapid growth of the semiconductor industry based in the industrial park where both foundries are located, severe constraints have been placed on the water and electricity supply in that region. Any shortages of water or electricity or a natural disaster could adversely affect these foundries' ability to supply our products, which could have a material adverse effect on our operating results.

Even our current outside foundries would need to have manufacturing processes qualified in the event of a disruption at the other foundry, which we may not be able to accomplish in a timely manner sufficient to prevent an interruption in the supply of the affected products. We cannot assure you that any existing or new foundries would be able to produce integrated circuits with acceptable manufacturing yields in the future, or will continue to have sufficient capacity to meet our needs. If our manufacturing requirements are not satisfied, our business would be materially harmed.

## Our semiconductors are complex to manufacture and may have errors or defects which could be costly to correct.

The manufacture of semiconductors is a complex process. Foundries may not achieve acceptable product yields from time to time due to the complexity of the integrated circuit design, inadequate manufacturing processes and other reasons. We refer to the proportion of final acceptable integrated circuits that have been processed, assembled and tested relative to the gross number of integrated circuits that could have been produced from the raw materials as our product yields. Identifying defects and determining the reason for low

yields may be discovered after production has begun and at various stages of the production cycle. Our failure to discover defects early in the production cycle will result in higher costs and may require a diversion of our technical personnel and resources away from product development in order to correct the defect. In addition, defective products that have been released into the market and distributed to our customers and end users may result in harm to our reputation, significant warranty costs, diversion of our technical and managerial resources and potential product liability claims that would be costly to defend.

Our software is complex and may have bugs or defects which could be costly to correct.

Our products depend on complex software that we develop internally and license from others. Complex software often contains defects, particularly when first introduced or when new versions are released. Determining whether our software has defects may occur after our products are released into the market and distributed to our customers and end users, and may result in harm to our reputation, significant warranty costs, diversion of our technical resources and potential product liability claims that would be costly to defend and divert managerial resources.

We face foreign business, political and economic risks because a majority of our sales are to customers outside of the United States.

Sales of our products to our OEM customers and to distributors located outside the United States accounted for 32%, 67% and 71% of our total revenues in fiscal years 2002, 2001 and 2000. We anticipate that sales to customers located outside the United States will continue to represent a significant portion of our total sales in future periods. In addition, many of our domestic customers sell their products outside of North America, thereby indirectly exposing us to risks associated with foreign commerce. Asian economic instability impacts the sales of products manufactured by our customers, as does the Chinese New Year, during which time many manufacturers and businesses close their operations. We may be negatively impacted by the terrorist attacks on the United States and the resulting conflicts worldwide. We could also experience greater difficulties collecting accounts receivable from customers outside of the United States. Accordingly, our operations and revenues are subject to a number of risks associated with foreign commerce.

To date, we have denominated sales of our products in foreign countries exclusively in United States dollars. As a result, any increase in the value of the United States dollar relative to the local currency of a foreign country will increase the price of our products in that country so that our products become relatively more expensive to customers in the local currency of that foreign country. As a result, sales of our products in that foreign country may decline. To the extent any of these types of risks materialize, our business would be materially harmed.

If the industries into which we sell our products experience recession or other cyclical effects impacting our customers' budgets, our operating results could be negatively impacted.

The primary customers for our products are companies in the advanced television and emerging display device markets. Any significant downturn in these particular markets or in general economic conditions which result in the cutback of research and development budgets or capital expenditures would likely result in the reduction in demand for our products and services and could harm our business. For example, the United States economy, including the semiconductor industry, has experienced a recession, which has negatively impact our business and operating results. A further decline in the United States economy could result from further terrorist attacks in the United States. If the economy continues to decline as a result of the recent economic, political and social turmoil, existing and perspective customers may continue to reduce their design budgets or delay implementation of our products, which could further harm our business and operating results.

In addition, the markets of semiconductor products are cyclical. In recent years, some Asian countries have experienced significant economic difficulties, including devaluation and instability business failures and a depressed business environment. These difficulties triggered a significant downturn in the semiconductor market, resulting in reduced budgets for chip design tools. In addition, the electronics industry has historically been subject to seasonal and cyclical fluctuations in demand for its products, and this trend may continue in

the future. These industry downturns have been, and my continue to be, characterized by diminished product demand, excess manufacturing capacity and subsequent erosion of average selling prices. As a result, our future operating results may reflect substantial fluctuations from period to period as a consequence of these industry patterns, general economic conditions affecting the timing of orders from customers and other factors. Any negative factors affecting the semiconductor industry, including the downturns described here, could significantly harm our business, financial condition and results of operations.

The rapid growth of our business and operations has strained and may continue to strain our administrative, operational and financial resources, and our failure to manage our future growth could affect our operations and our future ability to expand.

We have in the past and may in the future experience rapid growth and expansion in our business and operations. Our growth has placed, and may continue to place, a significant strain on our administrative, operational and financial resources and increased demands on our systems and controls. Our future growth may require the implementation of a variety of new and upgraded operational and financial systems, procedures and controls, including improvement of our accounting and other internal management systems, all of which may require substantial managerial effort. We cannot assure you that these efforts would be accomplished successfully. Our growth has resulted in a continuing increase in the level of responsibility for both existing and new management personnel, and may require that we recruit, hire and train a substantial number of new personnel. Our failure to manage our past and future growth could prevent us from successfully achieving market acceptance for our products, disrupt our operations, delay our expansion and harm our business.

We depend on key personnel, the loss of whom would impair or inhibit the growth of our business.

Our success depends on the skills, experience and performance of our executive officers and other key management and technical personnel, many of whom would be difficult to replace. We are particularly dependent on Kenny Liu, our Chairman, and Eli Porat, our Chief Executive Officer and President. The competition for employees with technical skills is intense, particularly in the San Francisco Bay Area, and we may not be able to attract and retain a sufficient number of such qualified new personnel in the future. The loss of the service of one or more of our key employees, or our failure to attract, retain and motivate qualified personnel would inhibit the growth of our business.

We rely on strategic relationships to commercialize our products, and these relationships may require that we expend significant resources without guarantees that our endeavors will be profitable.

We rely on strategic relationships with some of our customers who we believe are the market leaders in our target markets. These relationships often involve the proposed development by us of new products involving significant technological challenges. Since the proposed products under development may offer potential competitive advantages to our customers, considerable pressure is frequently placed on us to meet development schedules. While an essential element of our strategy involves establishing such relationships, these projects require substantial amounts of our limited resources, with no guarantee of revenues to us, and could materially detract from or delay the completion of other important development projects. Delays in development could impair the relationship between our customers and us and negatively impact sales of the products under development. Moreover, our customers may develop their own solutions for products currently supplied by us, which could have an adverse effect on our business.

We depend on third party subcontractors for assembly of our semiconductors which reduces our control over the delivery, quantity, quality, or cost of our products.

Substantially all of our products are assembled by one of two subcontractors, both of which are located in Taiwan. Typically, we procure services from these subcontractors on a purchase order basis. Their availability to assemble our products could be adversely affected if either subcontractor experiences financial difficulties or suffers any damage or destruction to its facilities or any other disruption of its assembly capacity. Because we rely on third party subcontractors for assembly of our products, we cannot directly control product delivery

schedules. We have experienced in the past, and may experience in the future, product shortages or quality assurance problems that could increase the cost of manufacturing or testing of our products. It is time consuming and difficult to find and qualify alternative assemblers. If we are forced to find substitute subcontractors, shipments of our products could be delayed. Any problems associated with the delivery, quantity or cost of our products could harm our business.

Political instability in the People's Republic of China or Taiwan could harm our manufacturing and research and development capabilities and negatively impact our product sales.

We operate our research and development facility in the People's Republic of China. In addition, almost all of our products are manufactured and assembled outside of the United States at facilities operated by third parties in Taiwan. The political and economic conditions in the region, including the People's Republic of China's dispute with Taiwan, may adversely impact our operations including manufacture and assembly of our products and research and development efforts. We cannot assure you that restrictive laws or policies on the part of either the People's Republic of China or the United States will not constrain our ability to operate in both countries. If we are required to relocate our facilities, our business will be disrupted and our costs associated with research and development will increase.

If our competitors use our intellectual property and proprietary rights, our ability to compete would be impaired.

Our success depends in part upon our rights in proprietary technology and processes that we develop and license from, and to, others. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality agreements with our employees, consultants and strategic partners in order to protect proprietary technologies that use our products. We cannot assure you that these measures will provide meaningful protection for our proprietary technologies and processes, and they do not prevent independent third party development of competitive products. In addition, it is difficult to monitor unauthorized use of technology, particularly in foreign countries where laws may not protect our proprietary rights as fully as in the United States.

We currently have patent applications pending in the United States, and we may seek additional patents in the future. Because the content of patent applications in the United States is not publicly disclosed until the patent is issued, applications may have been filed which relate to our products or processes. We cannot assure you that our current patent applications or any future patent applications will result in a patent being issued with the scope of the claims we seek, if at all, or whether any patents we have or may receive will be challenged or invalidated. The failure of any patents to provide protection to our technology would make it easier for our competitors to offer similar products.

We may face intellectual property infringement claims that could be costly and could result in the loss of proprietary rights which are necessary to our business.

Other parties may assert patent infringement claims against us, including claims against technology that we license from others, and our products or processes may infringe issued patents of others. Litigation is common in the semiconductor industry and any litigation could result in significant expense to us. Litigation would also divert the efforts of our technical and management personnel, whether or not the litigation is determined in our favor. Litigation could also require us to develop non-infringing technology or enter into royalty or license agreements. These royalty or license agreements may not be available on acceptable terms, including limitations on representations and warranties regarding infringement and indemnification in the event of infringement claims. Our failure or inability to develop non-infringing technology, license the proprietary rights on a timely basis or receive appropriate protection on licensed technology would harm our business.

Regulation of our customers' products may slow the process of introducing new products and could impair our ability to compete.

The Federal Communications Commission, or the FCC, has broad jurisdiction over our target markets. Various international entities or organizations may also regulate aspects of our business or the business of our customers. Although our products are not directly subject to regulation by any agency, the transmission pipes, as well as much of the equipment into which our products are incorporated, are subject to direct government regulation. For example, before they can be sold in the United States, advanced televisions and emerging interactive displays must be tested and certified by Underwriters Laboratories and meet FCC regulations. Accordingly, the effects of regulation on our customers or the industries in which our customers operate may, in turn, harm our business. FCC regulatory policies affecting the ability of cable operators or telephone companies to offer certain services and other terms on which these companies conduct their business may impede sales of our products. In addition, our business may also be adversely affected by the imposition of tariffs, duties and other import restrictions on systems of suppliers or by the imposition of export restrictions on products that we sell internationally. Changes in current laws or regulations or the imposition of new laws or regulations in the United States or elsewhere could harm our business.

We may not be able to maintain our listing on the Nasdaq National Market and if we fail to do so, the price and liquidity of our common stock may decline.

The Nasdaq Stock Market has quantitative maintenance criteria for the continued listing of common stock on the Nasdaq National Market. The current requirements affecting us include (i) having net tangible assets of at least \$4 million and (ii) maintaining a minimum bid price per share of \$1. On June 19, 2002, our stock price closed at \$0.96. Also, effective November 1, 2002, we will also have to comply with the Nasdaq National Market's revised quantitative maintenance criteria including a new minimum requirement of \$10 million in stockholders' equity. There can be no assurance that we will be able to comply with the quantitative maintenance criteria or any of the Nasdaq National Market's rules in the future. If we fail to maintain continued listing on the Nasdaq National Market and must move to a market with less liquidity, our financial condition could be harmed and our stock price would likely decline. If we are delisted, it could have a material adverse effect on the market price of, and the liquidity of the trading market for, our common stock.

#### Item 7A. Quantitative and Qualitative Disclosures About Market Risk

#### Quantitative and Qualitative Discussion of Market Interest Rate Risk

Our cash equivalents and short-term investments are exposed to financial market risk due to fluctuation in interest rates, which may affect our interest income and, in the future, the fair market value of our investments. We manage the exposure to financial market risk by performing ongoing evaluations of our investment portfolio and we presently invest entirely in short-term investment grade government and corporate securities. These securities are highly liquid and generally mature within 12 months from the purchase date. Due to the short maturities of our investments, the carrying value should approximate the fair value. In addition, we do not use our investments for trading or other speculative purposes. We have performed an analysis to assess the potential effect of reasonably possible near term changes in interest and foreign currency exchange rates. The effect of any change in foreign currency exchange rates is not expected to be material to our results of operations, cash flows or financial condition. Due to the short duration of our investment portfolio, an immediate 10% change in interest rates would not have a material effect on the fair market value of our portfolio. Therefore, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our securities portfolio.

#### Foreign Currency Exchange Risk

We are an international company, selling our products globally and, in particular, in Japan, Korea, the People's Republic of China and Taiwan. Although we transact our business in United States dollars, we cannot assure you that future fluctuations in the value of the United States dollar will not affect the competitiveness of our products, gross profits realized, and results of operations. Further, we incur expenses in the People's Republic of China, Taiwan and other countries that are denominated in currencies other than United States dollars. We cannot estimate the effect that an immediate 10% change in foreign currency exchange rates would have on our future operating results or cash flows as a direct result of changes in exchange rates. However, we do not believe that we currently have any significant direct foreign currency exchange rate risk and have not hedged exposures denominated in foreign currencies or any derivative financial instruments.

### Item 8. Financial Statements and Supplementary Data

### INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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### REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders of Tvia, Inc.:

In our opinion, the accompanying consolidated balance sheet as of March 31, 2002 and the related consolidated statements of operations, of redeemable convertible preferred stock and stockholders' equity (deficit) and of cash flows present fairly, in all material respects, the financial position of Tvia, Inc. and its subsidiary at March 31, 2002, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

/s/ PRICEWATERHOUSECOOPERS LLP PricewaterhouseCoopers LLP

San Jose, California May 7, 2002

### THIS IS A COPY OF THE LAST AUDIT REPORT PREVIOUSLY ISSUED ON APRIL 30, 2001 BY ARTHUR ANDERSEN LLP AND IT HAS NOT BEEN REISSUED BY ARTHUR ANDERSEN LLP.

### INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Stockholders of Tvia, Inc.:

We have audited the accompanying consolidated balance sheets of Tvia, Inc. and subsidiary (a Delaware corporation) as of March 31, 2001 and 2000, and the related consolidated statements of operations, redeemable convertible preferred stock and stockholders' equity (deficit) and cash flows for each of the three years in the period ended March 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Tvia, Inc. and subsidiary as of March 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2001, in conformity with generally accepted accounting principles in the United States.

Our audits were made for the purpose of forming an opinion on the basic financial statements as a whole. The schedule listed under Item 14(a) is presented for purposes of complying with the Securities and Exchange Commission's rules and is not a part of the basic financial statements. This schedule has been subjected to the auditing procedures applied to our audits of the basic financial statements and, in our opinion, fairly states in all material respects the financial data required to be set forth therein in relation to the basic financial statements as a whole.

/s/ Arthur Andersen LLP

San Jose, California April 30, 2001

### TVIA, INC. AND SUBSIDIARY CONSOLIDATED BALANCE SHEETS

	Marc	h 31,
	2002	2001
	(In thousand share	
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 6,445	\$ 21,267
Short term investments	29,060	25,415
Accounts receivable, net of allowance for doubtful accounts of \$112 and \$439, respectively	164	1,941
Inventories	1,510	4,343
Other current assets and prepaid expenses	1,262	1,352
Total current assets	38,441	54,318
Property and Equipment, net	2,945	1,974
Other Assets	2,001	1,143
Total assets	\$ 43,387	\$ 57,435
LIABILITIES AND STOCKHOLDER'S EQUITY		
Current Liabilities:		
Accounts payable	\$ 691	\$ 1,132
Accrued liabilities and other	1,771	2,881
Total current liabilities		4,013
Commitments and Contingencies (Note 5)		
Stockholders' Equity		
Preferred stock, \$0.001 par value: 5,000 shares authorized; none outstanding	_	_
Common stock, \$0.001 par value: 125,000 shares authorized; 22,138 and 21,830 shares outstanding, respectively	22	22
Additional paid-in-capital	92,388	92,075
Deferred stock compensation	(595)	(2,167)
Accumulated comprehensive income	31	148
Accumulated deficit	(50,261)	(35,996)
Treasury stock	(660)	(660)
Total stockholders' equity	40,925	53,422
Total liabilities and stockholders' equity	\$ 43,387	\$ 57,435

The accompanying notes are an integral part of these consolidated financial statements.

### TVIA, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS

Year Ended	d March	31,
	001	2000
(In thousands, a smooth	except p unts)	er share
Revenues:	,	
Product sales \$ 11,342 \$12	2,743	\$ 6,528
Development contracts and other	701	529
Total revenues	3,444	7,057
Cost of revenues:	,	
Product sales (excluding amortization of deferred compensation of \$19,		
	7,650	3,622
Development contracts and other	68	<u> 185</u>
Total cost of revenues	7,718	3,807
Gross profit	5,726	3,250
Operating expenses:		
Research and development (excluding amortization of deferred stock		
	5,774	3,390
Sales, general and administrative (excluding amortization of deferred stock compensation of \$963, \$1,669 and \$1,218, respectively) 5,056 5	5,695	3,370
• • •	2,701	1,499
	5,170	8,259
	9,444)	(5,009)
Other expense (income), net:	106)	(40)
	2,105)	(49)
Interest expense —	132	328
Amortization of debt guarantee costs and other	327	<u>753</u>
Other expense (income), net	<u>,646</u> )	1,032
•	7,798)	(6,041)
Extraordinary item, net of income tax	672	
Net loss	3,470)	(6,041)
Dividend related to convertible preferred stock	671	2,161
Net loss attributable to common stockholders \$(14,265) \$(9	), <u>141</u> )	\$(8,202)
Basic and diluted net loss per share attributable to common stockholders:		
Net loss attributable to common stockholders before extraordinary		
· · · · · · · · · · · · · · · · · · ·	(0.56)	\$ (2.63)
Extraordinary item, net of income taxes	0.05	
Net loss attributable to common stockholders <u>\$ (0.66)</u> <u>\$ (</u>	(0.61)	\$ (2.63)
Shares used in computing basic and diluted net loss attributable to		
	5,052	3,118

The accompanying notes are an integral part of these consolidated financial statements.

### TVIA, INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year	Ended March	31,
	2002	2001	2000
	(	In thousands)	
Cash Flows from Operating Activities:			
Net loss	\$(14,265)	\$ (8,470)	\$(6,041)
Adjustments to reconcile net loss to net cash used in operating activities:	1 001	427	210
Depreciation and amortization	1,091	437	318
Common stock and options issued for bonus and/or services rendered	1,572	28 2,701	289 1,499
Amortization of deferred stock compensation	500	2,701	1,499
Non-cash amortization of guarantee costs and other		1,126	753
Changes in assets and liabilities:		1,120	755
Accounts receivable	1,777	(931)	(947)
Inventories	2,833	(3,016)	(1,011)
Other current assets and prepaid expenses	90	(1,279)	(106)
Accounts payable	(441)	(630)	1,196
Accrued liabilities and other	(1,110)	<u>481</u>	952
Net cash used in operating activities	(7,953)	(9,553)	(3,098)
Cash Flows from Investing Activities:		·	
Purchase of available-for-sale investments	(3,762)	(25,415)	
Purchase of property and equipment	(2,062)	(2,190)	(225)
Purchase of intangible assets	(1,358)		·
Net cash used in investing activities	(7,182)	(27,605)	(225)
Cash Flows from Financing Activities:			
Proceeds from loans payable	_	159	3,306
Payments on loans payable	_	(4,188)	(991)
Proceeds from issuance of common stock	313	1,014	312
Proceeds from convertible and redeemable convertible preferred stock, net	_		7,560
Treasury stock repurchase	_	(660)	_
Proceeds from initial public offering net of IPO costs	_	55,236	_
Restricted funds from stock subscription for convertible preferred stock		3,075	(3,075)
Net cash provided by financing activities	313	54,636	7,112
Net increase (decrease) in cash and cash equivalents	(14,822)	17,478	3,789
Cash and cash equivalents at beginning of period	21,267	3,789	
Cash and cash equivalents at end of period	\$ 6,445	\$ 21,267	\$ 3,789
Supplemental Cash Flow Information:			<del></del>
Interest paid	\$ —	\$ 132	\$ 126
Conversion of accrued salary to redeemable convertible preferred stock	<del></del>	<u> </u>	\$ 244
· · · · · · · · · · · · · · · · · · ·		<del>y</del>	
Fair value of warrant and options issued to guarantors of lines of credit	<u>\$</u>	<u>\$ —</u>	\$ 738
Conversion of accrued salary upon exercise of options	<u> </u>	<u> </u>	<u>\$ 96</u>
Conversion of debt to subscription for Series I shares	<u> </u>	<u>\$</u>	<u>\$ 500</u>
Purchase of technology license through conversion of Series I shares	<u>\$</u>	<u>\$</u>	\$ 150
Costs incurred related to initial public offering	\$	\$ —	\$ 671

The accompanying notes are an integral part of these consolidated financial statements.

# CONSOLIDATED STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)

	Redeem Pre	Redeemable Convertible Preferred Stock	<u>a</u>	Convertible Preferred Stock	ble Stock	Common Stock	Stock	Additional Poid in	Deferred	Accumulated Other		F	Stockholders'
	Shares	Amount	Warrants	Shares	Amount	Shares	Par amount	Capital	Compensation	Comprenensive	Accumulated Deficit	Stock	Equity (Deficit)
						(In thousa	nds, except p	(In thousands, except per share data)					
Balance @ March 31, 1999	3,819,105	\$ 9,704	\$ 111	5,305,454	\$ 5,525	2,233,558	-\$	\$ 180	\$ (30)	 <del>\$</del>	\$(18,653)	<b>⇔</b>	\$(12,978)
options to guarantor of line of credit	I	1	738		1	1	1	1,001	ļ		1		1,001
suance of Series G Redeemable Convertible Preferred Stock	83,333	250	1	1	ļ	١	1	J	ļ	I	1	I	.
Issuance of Series H Redeemable Preferred Stock net of issuance													
cost of \$39.  Issuance of Series I Convertible	1,204,947	4,479	1	l	1		1	J	J	l	1	1	1
Preferred Stock, net of issuance cost of \$8.  Deferred stock compensation Fair value of options for service	1	İ	1	496,658	3,717	1	1	5,968	(5,968)	11			3,717
rendered		1	ļ	١		1	1	68	1	l	1	İ	68
Exercise rendered  Exercise of options  A mortization of deferred	11	1	1-1	11	1.1	40,035 2,960,213	11	200 408	} ]	1.1	1 1	1 1	200 408
compensation	1		1	1	1	1	I,	1	1,499		ĺ	I	1,499
convertible preferred stock	1	2,161	}	١	ļ	l	1	J	1	İ	(2,161)		(2,161)
Balance @ March 31, 2000	5,107,385	16,594	849	5,802,112	9,242	5,233,806	П	7,846	(4,499)	1   1	$\frac{(6,041)}{(26,855)}$		$\frac{(6,041)}{(14,266)}$
Conversion of common stock from no par to \$0.001 par value Dividend related to redeemable		1	}		1		\$	(5)	j	I	-	1	Ì
convertible preferred stock		671	1	1	)	ļ	(	1	j	1	(671)	1	(671)
offering, net of costs	1	1	ł	l	1	5,675,050	9	55,230	}				55,236
common stock	(5,107,385)	(17,265)		(5,802,112)	(9,242)	(9,242) 10,909,497	Ξ	26,496	J	I	1	l	17,265
warrants	l	1	(848)		}		İ	849	1		١	I	849
Issuance of warrants to WindRiver	1	I		1	1	1	ł	250		1	1	1	250
Deterred stock compensation Issuance of common stock for bonus		1 1			1.1		1-1	367	(369)	[-]	1-1		(5) 28
nization deferred stock	ļ	I	1	ļ	ļ	ļ	ì	J	2 701	ļ	!		107.6
Sale of common stock to WindRiver	1	1	1	1	J	606'06	1	1,000	<b>i</b>		1		1,000
Repurchase of common stock Common stock issued under	1		1		ļ	(22,369)	1	(2)		!	1	l	(2)
employee stock purchase plan	1	1	1	1	1	1,685	ì	91	J		1		91
Exercise of options			1	l	ļ	1,110	1	J	1		1	18	189
Unrealized gain on available-for-sale	l	1	ļ	1	}	(00,000)	1	ļ	ļ	l	ſ	(000)	(000)
investments	1 1		1 1		1 !		1 1	1 !	1 !	148	(07) 8)	1	148
Balance @ March 31, 2001		1				21,829,688	22	92,075	(2,167)	148	(35,996)	1 (099)	53,422
							ļ						

TVIA, INC. AND SUBSIDIARY

## CONSOLIDATED STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT) (Continued)

	Redeem	Redeemable Convertib	Je	Convertible Professed Stock	ble Stock	Common	Crock	Additional	Deferred	Accumulated Other			Stockholders'
	Shares Amon	Amount	Warrants	Shares	Amount	Shares	Par amount	Paid-in Canital	Stock Compensation	Comprehensive Income	Accumulated Deficit	Treasury Stock	Equity (Deficit)
						(In thous	(In thousands, except per share data)	er share data)					(manner)
Amortization of deferred stock compensation	1	1	1	1		1	1		1,572	I	1	1	1,572
ESPP and through exercises of stock options.	ì	1	1	1	I	307,915	ļ	313	1	1	I	Ī	313
investments	1	1	1	I	1	ı	I	1	1	(1117)	!	I	(117)
Net loss	1		1	İ	1	I	1	1	-	1	(14,265)	1	(14,265)
Balance @ March 31, 2002		\$	645		<del>\$</del>	22,137,603	\$22	\$92,388	\$ (595)	\$ 31	\$(50,261)	\$(660)	\$ 40,925

The accompanying notes are an integral part of these consolidated financial statements.

### TVIA, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Business

Tvia, Inc. ("the Company" or "Tvia") was incorporated in California in March 1993 and reincorporated as a Delaware corporation in August 2000. Tvia designs, develops and markets multi-media display processors for the advanced television and emerging interactive display markets. The Company's products, which consist of integrated circuits and proprietary software, process video, graphics and audio signals from terrestrial broadcast, narrow band telephone lines, cable, satellite and Ethernet and blend them together on one or more displays for a high quality, customized and interactive viewing experience. The Company sells its multi-media display processors to manufacturers of advanced television and emerging interactive displays. The Company has a subsidiary in the People's Republic of China that supports the Company's research and development activities, performs product testing and sales and marketing functions, and branches in Taiwan and the United Kingdom that operate as sales offices. The Company is subject to the risks associated with similar technology companies. These risks include, but are not limited to: history of operating losses, dependence on a small number of key individuals, customers and suppliers, competition from larger, more established companies, the impact of rapid technological changes and changes in customer demand/requirements.

On August 14, 2000, the Company closed its initial public offering in which it sold 5,000,000 shares of its common stock at \$11.00 per share, and granted the underwriters an option to purchase up to 750,000 shares to cover over-allotments. Upon the closing of the offering, all of the Company's 10,909,497 shares of preferred stock automatically converted into common stock, and warrants to purchase 288,330 shares of preferred stock automatically converted into warrants to purchase common stock. On September 11, 2000, the underwriters exercised the over-allotment option to purchase 675,050 shares of common stock at \$11.00 per share. Proceeds from the offering were \$55.2 million, net of all initial public offering costs.

A loan payable guaranteed by a related party of \$3.0 million was repaid from proceeds of the initial public offering and, as a result of the early extinguishment of debt, the unamortized portion of the debt guarantee cost was recorded as an extraordinary item, net of income taxes, which totaled to \$672,000.

### 2. Significant Accounting Policies

### Use of Estimates

The preparation of financial statements in accordance with generally accepted accounting principles accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, and such differences could be material and affect the results of operations reported in future periods.

### Consolidation

The consolidated financial statements herein presented include the results and financial position of Tvia and its wholly-owned subsidiary in China. The functional currency of the Chinese subsidiary is the U.S. dollar; accordingly, all gains and losses arising from foreign currency transactions in currencies other than the U.S. dollar are included in the consolidated statements of operations. All intercompany transactions and balances have been eliminated in consolidation.

### Cash and Cash Equivalents and Short-Term Investments

The Company considers all highly liquid investment securities with original maturities of three months or less from the date of purchase to be cash and cash equivalents. Management determines the appropriate classification of short-term investments at the time of purchase and evaluates such designations as of each balance sheet date. To date, all short-term investments have been classified as available-for-sale and are

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

carried at fair value with unrealized gains and losses, if any, included as a component of accumulated comprehensive loss in stockholders' equity, net of any related tax effects. Interest, dividends and realized gains and losses are included in other expense (income), net in the consolidated statements of operations. The value of the Company's investments by major security type is as follows:

		As of Mar	ch 31, 2002	
	Amortized Cost	Aggregate Fair Value	Unrealized Gain	Unrealized Loss
		(In the	usands)	
U.S. government and agency securities	\$ 2,249	\$ 2,241	\$ —	\$(8)
U.S. corporate and bank debt	26,780	26,819	39	
	<u>\$29,029</u>	\$29,060	\$ 39	<u>\$(8)</u>
		As of Mar	ch 31, 2001	
	Amortized Cost	Aggregate Fair Value	Unrealized Gain	Unrealized Loss
		(In tho	usands)	
U.S. government and agency securities	\$ 2,408	\$ 2,407	\$	\$(1)
U.S. corporate and bank debt	22,859	23,008	149	_
	<u>\$25,267</u>	\$25,415	<u>\$149</u>	<u>\$(1</u> )

### Revenue Recognition

The Company recognizes revenue from product sales upon shipment to OEMs and end users provided that persuasive evidence of an arrangement exists, the price is fixed, title has transferred, collection of resulting receivables is reasonably assured, there are no customer acceptance requirements, and there are no remaining significant obligations. Reserves for sales returns and allowances are recorded at the time of shipment. Our sales to distributors are made under agreements allowing for returns or credits under certain circumstances. The Company defers recognition of revenue on sales to distributors until products are resold by the distributor to the end user.

The Company also sells software development kits and application modules to OEMs. The Company recognizes sales of software development kits and application modules in accordance with the American Institute of Certified Public Accountants Statement of Position 97-2 "Software Revenue Recognition" ("SOP 97-2"), as amended by SOP 98-4 and SOP 98-9. Under SOP 97-2, software revenues are recognized when an agreement has been executed or a definitive purchase order has been received and the product has been delivered, no significant obligations with regard to implementation remain, the fee is fixed and determinable and collectibility is probable. For the years ended March 31, 2002, 2001 and 2000, revenues from the sale of software development kits and application modules were less than 10% of net revenues.

Revenues to significant customers, those representing approximately 10% or more of total revenues for the respective periods, are summarized as follows:

		for the Year ded March	
	2002	2001	2000
Customer A	62%	12%	*%
Customer B	14%	*	12%
Customer C	*	12%	*
Customer D	*	10%	16%

<sup>(\* =</sup> less than 10%)

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

### Software Development Costs

The Company accounts for software development costs in accordance with Statement of Financial Accounting Standards ("SFAS") No. 86, "Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed." The Company has expensed all software development costs to date as substantially all of such development costs have been incurred prior to the Company's products attaining technological feasibility.

### Research and Development Expenses

Research and development expenses consist primarily of salaries and related costs of employees engaged in research, design and development activities. The Company expenses all research and development related expenses in the period in which such expenses are incurred.

### Long-Lived Assets

The Company reviews long-lived assets and certain identifiable intangibles for impairment. The Company reviews assets to be held and used whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. The Company measures recoverability of assets by comparing their carrying amount to the future undiscounted cash flows that they are expected to generate. Impairment reflects the amount by which the carrying value of the assets exceeds their fair market value. For the year ended March 31, 2002, the Company wrote off \$500,000 of licensed technology related to a product that has been postponed indefinitely.

### Comprehensive Loss

The Company adopted SFAS No. 130 "Reporting Comprehensive Income" establishes standards for reporting and displaying comprehensive income in a full set of financial statements. Comprehensive income or loss includes unrealized investment gains that have been previously excluded from net loss and reflected instead as a component of accumulated comprehensive income or loss in stockholders' equity. A summary of comprehensive loss is as follows (in thousands):

	For the Y	ear Ended Ma	arch 31,
	2002	2001	2000
Net loss	\$(14,265)	\$(9,141)	\$(8,202)
Unrealized gain (loss) on available-for-sale investments	(117)	148	
Comprehensive loss	\$(14,382)	<u>\$(8,993)</u>	<u>\$(8,202</u> )

### Accounting for Stock-Based Compensation

The Company accounts for stock-based employee compensation arrangements using the intrinsic value method as prescribed in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB No. 25") and Financial Accounting Standards Board Interpretation No. 44 "Accounting for Certain Transactions Involving Stock Compensation" (FIN 44). Accordingly, compensation cost for stock options is measured as the excess, if any, of the fair value of the Company's stock at the date of grant over the stock option exercise price. Expense associated with stock-based compensation is amortized on an accelerated basis over the vesting period of the individual award consistent with the method described in Financial Accounting Standards Board Interpretation No. 28 ("FIN 28"). The Company accounts for stock issued to non-employees in accordance with the provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS No. 123") and Emerging Issues Task Force Consensus No. 96-18, "Accounting for Equity Instruments that are offered to other than employees for acquiring or

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

in conjunction with selling goods or services" ("EITF 96-18"). Under SFAS No. 123 and EITF 96-18, stock option awards issued to non-employees are accounted for at their fair value, determined using the Black-Scholes option pricing method. The fair value of each non-employee stock option or award is remeasured at each period end until a commitment date is reached, which is generally the vesting date.

### Stock Split

In June 2000, the Company's board of directors approved a 1-for-3 stock split of the Company's common and preferred stock. All references in the accompanying consolidated financial statements to earnings per share and the number of shares have been retroactively restated to reflect the stock split.

### Net Loss Per Share

Historical net loss per share has been calculated in accordance with the Financial Accounting Standards Board Statement No. 128, "Earnings Per Share." Basic net loss per share is computed using the weighted average number of shares of common stock outstanding. Diluted loss per share information is the same as basic net loss per share since common shares issuable upon conversion of the redeemable convertible preferred stock, convertible preferred stock, stock options and warrants are antidilutive. The total number of shares excluded from diluted net loss per share relating to these securities was 4,161,653, 3,094,441 and 11,073,866 for the years ended March 31, 2002, 2001 and 2000, respectively.

The following table presents the calculation of basic and pro forma basic net loss per share (in thousands, except per share data):

	Year Ended March 31,		
	2002	2001	2000
Net loss attributable to common stockholders before extraordinary item	\$(14,265)	\$(8,469)	\$(8,202)
Extraordinary item, net of income taxes		(672)	
Net loss attributable to common stockholders	<u>\$(14,265</u> )	<u>\$(9,141</u> )	<u>\$(8,202)</u>
Basic and diluted:			
Weighted average shares of common stock outstanding	21,925	15,779	3,199
Less: Weighted average shares of common stock subject to repurchase	(294)	<u>(727</u> )	<u>(81</u> )
Weighted average shares used in computing basic and diluted net loss per share before and after extraordinary item	21,631	15,052	3,118
Basic and dilutive net loss per share attributable to common stockholders before extraordinary item	\$ (0.66)	\$ (0.56)	\$ (2.63)
Extraordinary item, net of income taxes		(0.05)	
Basic and dilutive net loss attributable to common stockholders per share	<u>\$ (0.66)</u>	<u>\$ (0.61)</u>	<u>\$ (2.63)</u>

### Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of bank deposits and accounts receivable. The Company places its cash and cash equivalents in checking and money market accounts in financial institutions. The Company's accounts receivable are derived primarily from sales to OEMs and distributors. The Company performs ongoing credit evaluations of its customers and maintains an allowance for potential doubtful accounts.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of March 31, 2002 and 2001, accounts receivable were concentrated with customers as follows:

	Marc	h 31,
	2002	2001
Accounts Receivable:		
Customer A	*	74%
Customer B	71%	*%

<sup>(\* =</sup> less than 10%)

The Company recorded bad debt expense of \$100,000 and \$428,000 for fiscal years 2002 and 2001, respectively.

### Vendor Concentration

The Company does not own or operate a fabrication facility, and accordingly relies substantially on two outside foundries, United Manufacturing Corporation ("UMC") and Taiwan Semiconductor Manufacturing Corporation ("TSMC") to supply all of the Company's semiconductor manufacturing requirements. There are significant risks associated with the Company's reliance on outside foundries, including the lack of ensured wafer supply, limited control over delivery schedules, quality assurance and control, manufacturing yields and production costs and the unavailability of or delays in obtaining access to key process technologies. Any inability of one of the foundries to provide the necessary components could result in significant delays and could have a material adverse effect on the Company's business, financial condition and results of operations. In the event either foundry suffers financial difficulties or suffers any damage or destruction to its respective facilities, or in the event of any other disruption of foundry capacity, the Company may not be able to qualify alternative manufacturing sources for existing or new products in a timely manner.

Substantially all of the Company's products are assembled and tested by one of two third-party subcontractors, Siliconware Precision Industries Ltd., and Advance Semiconductor Engineering, Inc., both located in Taiwan. The availability of assembly and testing services from these subcontractors could be adversely affected in the event any subcontractor experiences financial difficulties or suffers any damage or destruction to its respective facilities, or in the event of any other disruption of assembly and testing capacity. As a result of this reliance on third-party subcontractors for assembly and testing of its products, the Company cannot directly control product delivery schedules, which has in the past, and could in the future, result in product shortages or quality assurance problems that could increase the cost of manufacture, assembly or testing of the Company's products.

### Recent Accounting Pronouncements

In July 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No.'s 141 and 142, "Business Combinations" and "Goodwill and Other Intangibles." SFAS No. 141 requires all business combinations initiated after June 30, 2001 to be accounted for using the purchase method. Under SFAS No. 142, goodwill is no longer subject to amortization over its estimated useful life. Rather, goodwill is subject to at least an annual assessment for impairment, applying a fair-value based test. Additionally, an acquired intangible asset should be separately recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if the intangible asset can be sold, transferred, licensed, rented, or exchanged, regardless of the acquirer's intent to do so. Other intangible assets will continue to be valued and amortized over their estimated lives; in-process research and development will continue to be written off immediately. The Company adopted SFAS No.'s 141 and 142 as of April 1, 2002. The adoption of SFAS No. 141 and 142 did not have a material impact on the Company's consolidated financial statements.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

In August 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets". SFAS No. 144 establishes one accounting model to be used for long-lived assets to be disposed of by sale, and broadens the presentation of discontinued operations to include more disposal operations. SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of", and the accounting and reporting provisions of APB Opinion No. 30. SFAS No. 144 is effective for fiscal years beginning after December 15, 2001. The Company adopted SFAS No. 144 as of April 1, 2002. The adoption of SFAS No. 144 did not have a material impact on the Company's consolidated financial statements.

On April 30, 2002, the FASB issued Statement No. 145, which rescinds Statement 4, which required all gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, net of related income tax effect. As a result, the criteria in Opinion 30 will now be used to classify those gains and losses. Statement 145 amends Statement 13 to require that certain lease modifications that have economic effects similar to sale-leaseback transactions be accounted for in the same manner as sale-leaseback transactions. The Company has not yet determined the impact that this statement will have on its financial position or results of operations.

### Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market and include materials, labor and overhead. Allowances when required are made to reduce excess inventories to their estimated net realizable values. Due to competitive pressures and technological innovation, it is possible that estimates of net realizable value would change in the near term. Inventories consist of the following:

		Mar	ch 31,
		2002	2001
		(In the	usands)
Raw materials	\$	371	\$2,598
Work in process		220	243
Finished goods		919	1,502
	\$1	,510	<u>\$4,343</u>

### Property and Equipment

Property and equipment are carried at cost and are depreciated using the straight-line method over the assets' estimated useful life of 24 months to five years. Management has determined asset lives based on their historical experience of technical obsolescence of equipment and the short life of tooling that is specific to certain product families. Property and equipment consist of the following:

	March 31,			_
	201	02	20	001
	(	In thou	sands	;)
Furniture and fixtures (Useful life of 24 months)	\$	85	\$	69
Machinery and equipment (Useful life of 24 to 60 months)	1,	973	1	,091
Software (Useful life of 24 to 60 months)	3,	<u>511</u>	2	,347
	5,	569	3	,507
Less: Accumulated depreciation and amortization	(2,	<u>624</u> )	_(1	<u>,533</u> )
	<u>\$ 2,</u>	945	\$ 1	,974

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Depreciation and amortization expense were \$1,091,000, \$437,000 and \$318,000 for fiscal years 2002, 2001 and 2000, respectively.

### Accrued Liabilities and Other

Accrued liabilities and other consist of the following:

	March 31,		h 31,
	2002		2001
		(In tho	usands)
Accrued software maintenance	\$	99	\$ 531
Accrued expenses		720	1,063
Accrued vacation		444	277
Accrued bonus and commissions		412	575
Accrued payroll and related taxes	_	96	435
	\$1	<u>,771</u>	<u>\$2,881</u>

### 3. Income Taxes

The Company accounts for income taxes in accordance with Statement of Financial Accounting Standards No. 109 ("SFAS No. 109"), "Accounting for Income Taxes." Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recorded or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income in the period that includes the enactment date.

As a result of the Company's continued losses, there was no provision for income taxes for the years ended March 31, 2002, 2001 and 2000.

The components of the net deferred income tax asset were as follows:

	March 31,		
	2002	2001	
	(In thousands)		
Net operating losses	\$ 12,823	\$ 8,999	
Reserves and accruals not deductible for tax purposes	962	1,045	
Available tax credit carryforwards	1,686	1,337	
Other timing differences	877	2,315	
	16,348	13,696	
Valuation allowance	(16,348)	(13,696)	
Net deferred tax asset	<u>\$</u>	<u>\$</u>	

At March 31, 2002, the Company had net cumulative operating loss carryforwards for federal and state income tax reporting purposes of approximately \$36.0 million and \$6.0 million, respectively. The federal net operating loss carryforwards expire on various dates through 2022. The state net operating loss carryforwards expire on various dates through 2012. As of March 31, 2002, the Company had federal and state research and development tax credit carryforwards of approximately \$1.6 million and California Manufacturers' Investment tax credit carryforwards of approximately \$80,000 available to offset future taxes. Utilization of net operating losses may be subject to annual limitations due to ownership change limitations imposed by the Internal

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Revenue Service and similar state provisions. A valuation allowance has been recorded for the entire deferred tax asset as a result of uncertainty regarding the realization of the asset balance due to the net losses incurred and lack of taxable income.

### 4. Loans Payable

### Loans Payable Guaranteed by Related Parties

The Company entered into two separate line of credit agreements with a bank which, in aggregate, provide for a \$3,000,000 revolving credit facility. Borrowings under the line of credit agreements carried interest at the three-month commercial paper rate plus 2.30%. The line of credit agreements were terminated in August 2000. The line of credit agreements were guaranteed by a pledge of trust assets where the Chief Executive Officer of the Company and his wife were both the trustor and trustee of the trust. In consideration for providing the guarantee, an individual related to the Chief Executive Officer of the Company received a guarantee fee based on the maximum amount available on the line of credit agreements.

In connection with the guarantee given for the period from December 31, 1997 to December 31, 1999, the related party was issued a warrant to purchase 73,333 shares of Series G redeemable convertible preferred stock for \$3.00 per share in December 1997, a warrant to acquire 26,666 shares of Series G redeemable convertible preferred stock for \$3.00 per share in July 1999 and an option to acquire 80,000 shares of common stock at \$0.12 per share in July 1999. The price per share, as defined in the respective warrant agreements, was variable up to December 31, 1999, at which point it became fixed.

In January 2000, the Company committed to grant the related party an additional warrant to acquire 106,666 shares of Series H redeemable convertible preferred stock for \$3.75 per share and granted an option to purchase 106,666 shares of common stock at \$0.375 per share pursuant to an extension of the guarantee over the line of credit agreements to April 30, 2001. The Company has calculated the fair value of the warrants and options using the Black-Scholes model and the following assumptions:

Risk-free interest rate	6.00%
Average computed life of warrants/options	3-5 years
Dividend yield	0%
Volatility of common stock	70%

The aggregate fair value of the warrants and options issued prior to December 31, 1999 was calculated at approximately \$426,000. This amount was recognized as a deferred debt issuance cost over the term of the guarantee. For the years ended March 31, 2001 and 2000, interest expense included \$981,000 and \$753,000, respectively, of amortized debt issuance costs related to these warrants and options issued prior to December 31, 1999. In addition, the Company paid \$215,000 to the guarantor, in cash, related to the guarantee for fiscal year 1999. The aggregate fair value of the warrants and option issued in January 2000 were calculated at approximately \$922,000. This amount was recognized as a deferred debt issuance cost and recorded over the term of the guarantee. This line of credit was terminated in August 2000.

In April 1999, the Company entered into an additional line of credit agreement with a different bank for a \$1.0 million credit facility. Borrowings under the line of credit facility carry interest at a fixed rate of 7.63%, and the line of credit has no fixed maturity date. The line of credit is guaranteed by a venture capital firm, which is both a shareholder in the Company and related to a former director of the Company. In consideration for providing the guarantee, the guarantor receives an annual guarantee fee based on the maximum amount available on the line of credit. This line of credit was terminated in August 2000.

In connection with the guarantee under this line of credit for the period from April 30, 1999 to April 30, 2000, a director was issued a warrant to acquire 33,333 shares of Series G convertible preferred stock for \$3.75 per share in April 1999. The price per share, as defined in the warrant agreement, was variable up to

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

December 31, 1999, at which point it became fixed. The director was also issued an option to acquire 26,666 shares of common stock at \$0.12 per share in July 1999.

In January 2000, the Company committed to grant an additional warrant to the director to acquire 26,666 shares of Series H redeemable convertible preferred stock for \$3.75 per share and granted an option to purchase 26,666 shares of common stock at \$0.375 per share pursuant to an extension of the guarantee over the line of credit agreement to April 30, 2001. The Company has calculated the fair value of the warrant and option using the Black-Scholes model and the following assumptions:

Risk-free interest rate	6.00%
Average computed life of warrants/options	4-5 years
Dividend yield	0%
Volatility of common stock	70%

The aggregate fair value of the warrant and option issued prior to December 31, 1999 was calculated at approximately \$162,000. Interest expense included \$148,000 of amortized debt issuance related to the warrant and option issued prior to December 31, 1999. The aggregate fair value of the warrant and option issued in January 2000 was calculated at approximately \$230,000. This amount was recognized as a deferred debt issuance cost and recorded as additional interest expense over the term of the guarantee. This line of credit was terminated in August 2000.

### Loan Payable to Bank

In June 1999, the Company entered into a line of credit facility with a bank for \$500,000, bearing interest at a prime-lending rate of 8.25% plus 1.50%, and with a maturity date of January 31, 2000. On March 30, 2000, the loan balance was exchanged for a subscription for Series I preferred stock (see Note 9). The credit facility was guaranteed and secured by a pledge of the Company's assets. In June 1999 and December 1999, the Company issued warrants to the bank to acquire 13,333 and 8,333 shares of Series G redeemable convertible preferred stock, respectively. The price per share of the warrants to purchase 13,333 and 8,333 shares was \$3.00 and \$3.75, respectively. The Company has calculated the fair value of the warrants using the Black-Scholes model and the following assumptions:

Risk-free interest rate	6.00%
Average computed life of warrants	4-5 years
Dividend yield	0%
Volatility of common stock	70%

The aggregate fair value of the warrants was approximately \$110,000. This amount was recognized as additional interest expense over the term of the loan. This line of credit matured on January 31, 2000.

In August 2000, the Company used some of the proceeds from its initial public offering to repay the outstanding balances under these three lines of credit. As a result of this early extinguishment of debt, the unamortized amount of debt guarantee costs was recorded an extraordinary item, net of income taxes, in the amount of \$0.7 million in the second quarter of fiscal 2001. All warrants issued in connection with these lines of credit were converted into warrants to purchase common stock at the time of the initial public offering.

### 5. Commitments and Contingencies

### Leases

The Company leases its facilities under non-cancelable operating leases expiring at various dates through June 2005. Under the terms of the leases, the Company is responsible for a portion of the facilities' operating

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

expenses, insurance and property taxes. Future minimum lease payments under all non-cancelable facility and operating leases as of March 31, 2002 were as follows (in thousands):

Fiscal <u>Year</u>	Amount
2003	 \$584
2004	 227
2005	 48
2006	 11
	\$870

Rent expense under operating leases for the years ended March 31, 2002, 2001 and 2000, were approximately \$561,000, \$407,000 and \$344,000, respectively.

### Litigation

The Company is subject to various claims which arise in the normal course of business. In the opinion of management, the Company is unaware of any claims which would have a material adverse effect on the financial position, liquidity or results of operations of the Company.

### Development Contract Commitment

In March 2000, the Company entered into a license agreement with a vendor. Under the terms of the agreement, the Company was required to pay a license fee of \$330,000. As of March 31, 2002, the Company satisfied the obligation by issuing 20,000 shares of Series I preferred stock at \$7.50 per share, and paying \$180,000 in cash. The Company recorded the \$330,000 as license fees in Other Assets. These license fees are being amortized over the estimated life of the products.

### Stock Repurchase

On November 20, 2001, the Board of Directors authorized a stock repurchase program to acquire outstanding common stock in the open market. Under this program, the Board of Directors authorized the acquisition of up to 200,000 of the Company's common stock. The Company did not acquire any treasury shares during the fiscal year ended March 31, 2002.

### 6. Redeemable Convertible Preferred Stock

In June 1999, the Company authorized the issuance and sale of up to 4,200,000 shares of Series H Preferred Stock ("Series H"). In March 2000, the Company completed the issuance of 1,139,881 shares of Series H redeemable convertible preferred stock at \$3.75 per share for cash and 65,066 shares of Series H upon the conversion of \$244,000 of accrued salary of the Chairman of the Board of the Company. Shares of Series H were sold to members of the board of directors and entities associated with members of management under the same terms and conditions as all other unrelated accredited investors. The Company recorded a preferred stock dividend of \$2,161,000 and \$671,000 representing the value of the beneficial conversion feature on the issuance of convertible preferred stock in March 2000 and June 2000, respectively. The beneficial conversion was calculated at the commitment date based on the difference between the conversion price of \$3.75 per share and the estimated fair value of the common stock at that date.

Upon the closing of the Company's initial public offering, all of the Company's 5,107,385 shares of redeemable preferred stock automatically converted into common stock, and warrants to purchase 288,330

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

shares of convertible preferred stock automatically converted into warrants to purchase the same number of shares of common stock.

### 7. Stockholders' Equity

### Convertible Preferred Stock

On April 3, 2000, the Company authorized the issuance and sale of up to 2,000,000 shares of Series I convertible preferred stock ("Series I"). The Company received approximately \$3,075,000 in cash proceeds for 409,992 shares of Series I in March 2000, and these shares were treated as subscribed convertible preferred stock at March 31, 2000. In addition, in March 2000, \$150,000 in license fees acquired were exchanged for a subscription of 20,000 shares of Series I and \$500,000 outstanding under a line of credit at March 31, 2000 was converted into 66,666 shares of Series I. Shares of Series I were sold to members of the board of directors and entities associated with members of management under the same terms and conditions as all other unrelated accredited investors. The Company recorded a preferred stock dividend of \$671,000 in the first quarter of fiscal 2001 representing the value of the beneficial conversion feature on the issuance of Series I.

Upon the closing of the Company's initial public offering in August 2000, all of the Company's 5,802,112 shares of convertible preferred stock automatically converted into common stock.

### Stock Option Plans

2000 Stock Incentive Plan and 2000 Employee Stock Purchase Plan

The 2000 Stock Incentive Plan (the "2000 Plan") provides for the issuance of shares of the Company's common stock to directors, employees and consultants. The 2000 Plan provides for the issuance of incentive stock options or non-qualified stock options. The 2000 Plan provides for the issuance of up to 2,333,333 shares of common stock, plus, commencing on January 1, 2001, annual increases equal to the lesser of 73,000 shares (amended on August 21, 2001 to 730,000 shares), 3% of the fully diluted outstanding common stock on January 1 of each year, or a lesser amount determined by the Board of Directors. Pursuant to the 2000 Plan, the exercise price for incentive stock options is at least 100% of the fair market value on the date of grant or for employees owning in excess of 10% of the voting power of all classes of stock, 110% of the fair market value on the date of grant. For non-qualified stock options, the exercise price is no less than 85% of the fair market value on the date of grant. Options generally expire in 10 years. Options generally vest ratably over four years beginning the date of grant. As of March 31, 2002, 1,996,951 options were available for grant under the 2000 Plan.

In March 2000, the Board of Directors adopted an Employee Stock Purchase Plan (the "ESPP"). A total of 333,333 shares of the Company's common stock were reserved for issuance under the ESPP, plus, commencing on April 1, 2001, annual increases equal to the lesser of 83,333 shares, 3% of the outstanding common stock on such date, or a lesser amount determined by the Board of Directors. Each participant may purchase up to 4,000 shares on any purchase date. The ESPP permits eligible employees to contribute up to 15% of cash compensation toward the semi-annual purchase of the Company's common stock. The purchase price is 85% of the fair market value on the day prior to the beginning of the six-month period at which an eligible employee is enrolled, or the end of each six-month offering period, whichever is lower. Employees purchased 1,685 and 251,289 shares in fiscal 2001 and 2002, respectively. As of March 31, 2002, 80,359 shares were available for purchase under the ESPP.

### 1999 Stock Incentive Plan

The Stock Incentive Plan (the "1999 Plan") provides for the issuance of up to 5,166,667 shares of the Company's common stock to directors, employees and consultants. The 1999 Plan provides for the issuance of restricted stock bonuses, restricted stock purchase rights, incentive stock options or non-qualified stock

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

options. Pursuant to the 1999 Plan, the exercise price for incentive stock options is at least 100% of the fair market value on the date of grant or for employees owning in excess of 10% of the voting power of all classes of stock, 110% of the fair market value on the date of grant. For non-qualified stock options, the exercise price is no less than 85% of the fair market value on the date of grant.

Options generally expire in 10 years. Vesting periods are determined by the Board of Directors; however, options generally vest ratably over four years beginning one year after the date of grant. Options may be exercised prior to full vesting. Any unvested shares so exercised are subject to a repurchase right in favor of the Company with the repurchase price to be equal to the original purchase price of the stock. The right to repurchase at the original price lapses at a minimum rate of 20% per year over five years from the date the options granted. The 2000 Plan is the successor to the 1999 Plan. Since the 2000 Plan became effective, no further grants were made under the 1999 Plan.

### 1994 Stock Option Plan

The Stock Option Plan (the "1994 Plan") provides for the issuance of options to acquire the Company's common stock to directors, employees and consultants. The 1994 Plan provides for the issuance of incentive stock options or non-qualified stock options. Pursuant to the 1994 Plan, the exercise price for incentive stock options is at least 100% of the fair market value on the date of grant or for employees owning in excess of 10% of the voting power of all classes of stock, 110% of the fair market value on the date of grant. For non-qualified stock options, the exercise price is no less than 85% of the fair market value on the date of grant. Options generally expire in 10 years. Options generally vest ratably over five years beginning the date of grant. In June 1999, all options outstanding under the 1994 Plan were cancelled and reissued under the 1999 Plan with the same terms and conditions as the previous options.

### Out of Plan Options

In November 2001, the Company issued two out of plan non-qualified options to acquire the Company's common stock. One grant was for 800,000 shares, vesting over a 4 year period. The second grant was for 200,000 shares, vesting over a 6 year period but with a provision for earlier vesting one year after the grant date provided that certain criteria are achieved. Both grants had an exercise price of \$1.27 per share, the fair market value on the date of grant, and expire in 10 years.

### TVIA, INC. AND SUBSIDIARY NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table summarizes activity under all of the Company's stock option plans and out-of-plan options:

	Outstanding Options	Weighted Average Exercise Price
Balance at March 31, 1999	2,376,368	\$0.12
Granted	2,795,960	2.18
Exercised	(2,960,213)	0.14
Cancellations	_(724,351)	0.12
Balance at March 31, 2000	1,487,764	3.98
Granted	1,448,977	5.98
Exercised	(1,110)	0.12
Cancellations	(174,574)	5.06
Balance at March 31, 2001	2,761,057	4.97
Granted	2,530,324	1.66
Exercised	(56,623)	0.26
Cancellations	(1,073,105) (1	6.51
Balance at March 31, 2002	4,161,653	<u>\$2.62</u>

<sup>(1)</sup> Includes 624,028 options cancelled pursuant to the Company's agreements with certain officers and employees.

Орг	tions Outstanding and	Exercisable		
Number Outstanding at March 31, 2002	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable at March 31, 2002	Weighted Average Exercise Price
593,063	7.34	\$ 0.27	593,063	\$ 0.27
1,000,000	9.67	1.27	1,000,000	1.27
438,386	9.36	1.46	438,386	1.46
110,000	9.60	1.77	110,000	1.77
631,590	9.32	2.10	631,590	2.10
556,304	8.78	2.52	556,304	2.52
513,478	8.26	5.62	513,478	5.62
179,998	7.97	8.85	179,998	8.75
37,164	8.33	9.00	37,164	9.00
101,670	8.33	11.00	101,670	11.00
<u>4,161,653</u>	8.84	<u>\$ 2.62</u>	<u>4,161,653</u>	\$ 2.62

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company accounts for these Plans under APB Opinion No. 25, "Accounting for Stock Issued to Employees," under which no compensation expense has been recognized as the grant price equaled the fair market value at date of grant. Had compensation expense for the stock plans been determined consistent with Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation," the impact on the Company's net loss would be as follows (in thousands, except per share data):

		For the Year Ended March 31,				
		2002	2	001	2	2000
Net loss:						
As reported	\$(	14,265)	\$(8	8,470)	\$(	6,041)
Pro forma	\$(	16,458)	\$(8	8,574)	\$(	9,633)
Basic and diluted net loss per share:						
As reported	\$	(0.66)	\$	(0.56)	\$	(1.94)
Pro forma	\$	(0.76)	\$	(0.57)	\$	(2.40)

The weighted average fair values of options granted in fiscal years 2002, 2001 and 2000 were \$1.66, \$4.92 and \$2.19, respectively. The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option pricing model with the following assumptions:

	March 31,		
	2002	2001	2000
Risk-free Interest Rate	4.12%	6.00%	6.00%
Expected Life of Options from Grant Date	4 years	4 years	4 years
Expected Dividend Yield	0.0%	0.0%	0.0%
Expected Stock Volatility	115.0%	103.0%	0.0%

Under the 2000 Employee Stock Purchase Plan, the Company does not recognize compensation cost related to employee purchase rights under the Stock Purchase Plan. To comply with the pro forma reporting requirements of SFAS 123, compensation cost is estimated for the fair value of the employees' purchase rights using the Black-Scholes option pricing model with the following assumptions for those rights granted in fiscal years 2002 and 2001:

	Marc	ch 31,
	2002	2001
Risk-free Interest Rate	2.71%	6.25%
Expected Life of Options from Grant Date	0.5 years	0.5 years
Expected Dividend Yield	0.0%	0.0%
Expected Stock Volatility	54.0%	150.0%

The weighted average fair values of the purchase rights granted in fiscal years 2002 and 2001 were \$1.59 and \$18.00, respectively.

### Deferred Stock Compensation

Deferred stock compensation represents the aggregate difference, at the grant date, between the respective exercise price of stock options and the fair value of the underlying stock. The deferred stock compensation expense is amortized on an accelerated basis over the vesting period of the individual award, generally four years. This method is in accordance with Financial Accounting Standards Board Interpretation No. 28. The Company had recorded unearned stock-based compensation of approximately \$0, \$369,000 and

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

\$5,968,000 in the fiscal years ended March 31, 2002, 2001 and 2000, respectively, and has amortized deferred stock compensation of \$1,572,000, \$2,701,000, and \$1,499,000, in these periods, respectively.

The amount of deferred stock compensation expense to be recorded in future periods could decrease if options for which accrued but unvested compensation has been recorded are forfeited.

### Stock Repurchase Agreements

In connection with the exercise of options pursuant to the 1999 Plan, employees entered into restricted stock purchase agreements with the Company. Under the terms of these agreements, the Company has a right to repurchase any shares at the original exercise price of the shares upon termination of employment. The repurchase right lapses ratably over the vesting term of the original grant. As of March 31, 2002, 179,595 shares were subject to repurchase by the Company.

### Options Granted to Non-employees

In fiscal year 2000, the Company granted options to purchase 75,000 shares of common stock to consultants under the 1999 Plan. These options had an exercise price of \$0.375 per share and were vested, exercisable and nonforfeitable upon grant. The Company recorded deferred compensation of \$459,000 based on the fair value of the option at the date of the grant calculated using the Black-Scholes model.

In July 1999, the Company granted an option to purchase 8,333 shares of common stock to a consultant under the 1999 Plan. The option had an exercise price of \$0.12 per share and vested upon grant. The Company recorded research and development expense of approximately \$26,000 based on the fair value of the option at the date of grant calculated using the Black-Scholes model.

The following assumptions were used in the Black Scholes model for calculating the fair value of the options granted:

Risk-free Interest Rate	6.00%
Expected Life of Options from Grant Date	1 year
Expected Dividend Yield	0%
Expected Stock Volatility	70%

### Stock Issued for Services Rendered

For the year ended March 31, 2000, the Company issued 40,035 shares of common stock in exchange for services rendered. The Company recorded approximately \$200,000 of operating expense, based on the fair value of the Company's common stock on the date of issuance. There were no options issued for services rendered in fiscal year 2002 and 2001.

### Option Exchange

In September 2001, the Company implemented option exchanges with eight officers and employees. These individuals were given the opportunity to exchange options for a new grant for the same number of shares at least six months and a day after completion of the option exchange. In September 2001, the Company accepted for cancellation options to purchase an aggregate of 624,028 shares of the Company's common stock with a weighted-average exercise price of \$7.48.

On April 5, 2002, in fiscal year 2003, the Company granted new options to purchase an aggregate of 624,028 shares of common stock to replace the eligible options that had been cancelled. The exercise price per share for the new options was \$1.67, the last reported trading price of the Company's common stock on that date.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

### 8. 401(k) Plan

Substantially all of the Company's employees are eligible to participate in the Tvia 401(k) Plan. The Company contributed \$37,000 and \$9,000 to the 401(k) Plan for the fiscal years ended March 31, 2002 and 2001, respectively. There were no matching contributions for the fiscal year ended March 31, 2000.

### 9. Related Party Transactions

### Accrued Salary Converted into Preferred Stock or Used to Exercise Options

For the year ended March 31, 2000, the Chairman of the Board of the Company elected to have a portion of his accrued salary forgiven to pay the exercise price of options upon exercise or converted into convertible preferred stock. In the year ended March 31, 2001, the Chairman of the Board elected to receive his compensation in cash. For the year ended March 31, 2000, the Chairman of the Board converted \$244,000 into a subscription for 65,066 shares of Series H redeemable convertible preferred stock at \$3.75 per share and converted \$96,000 upon exercise of options at \$0.12 per share.

### Commission and Severance Payments

In the year ended March 31, 2000, the former President of the Company was entitled to receive a 1.75% commission on the amount of third party participation in the issuance of Series I preferred stock. The commission was paid in a combination of shares of common stock and cash of approximately \$56,000. Our former President resigned on January 31, 2002 and received a severance package that included additional salary equal to \$94,000 and an additional six months of vesting for his stock options.

### Sales to Related Parties

A member of the Board of Directors is an officer of a company which is an affiliate company of a major customer. Sales to this customer were \$127,000, \$43,000 and \$292,000 for the years ended March 31, 2002, 2001 and 2000, respectively.

### Payments to Related Parties

A former member and a current member of the Board of Directors are officers of companies which are affiliated with the Company's major vendors UMC and TSMC, respectively. Purchases from UMC amounted to \$2,485,000 for the fiscal year ended March 31, 2002. Total combined payments to UMC and TSMC amounted to \$7,062,000 and \$2,041,000, respectively, for the fiscal years ended March 31, 2001 and 2000, respectively. The accounts payable outstanding to UMC as of March 31, 2002 was \$173,000. The total combined accounts payable outstanding to UMC and TSMC as of March 31, 2001 and 2000 were \$312,000 and \$781,000, respectively.

Another member of the Board of Directors received \$13,000 and \$10,500 in the year ended March 31, 2002 and 2001, respectively, and an option to purchase 25,000 shares of common stock in the year ended March 31, 2001, for providing management consulting services.

### 10. Segment and Geographic Information

SFAS No. 131, "Disclosures About Segments of an Enterprise and Related Information," establishes standards for disclosures about operating segments, products and services, geographic areas and major customers. The Company is organized and operates in one reportable segment, which is the development, manufacture and sale of streaming media integrated circuits for the advanced television and emerging interactive display markets.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company has operations in the United States, Taiwan and China. The operating expenses of the Taiwan branch and China subsidiary for the years ended March 31, 2002, 2001 and 2000, and the total assets as of the respective dates in Taiwan and China were not material to the Company's consolidated financial statements.

The following table summarizes revenues by geographic area as a percentage of total revenues:

	For the Year Ended March 31,		
	2002	2001	2000
Taiwan	22%	34%	41%
Japan	*	11%	*
United States	68%	33%	29%
Korea	*	*	12%
Europe	*	11%	*

<sup>(\*</sup> Less than 10%)

### 11. Selected Quarterly Financial Data (unaudited)

The following table presents selected unaudited quarterly information for 2002 and 2001 (in thousands, except per share data):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2002:				
Total revenues	\$ 2,463	\$ 3,515	\$ 4,210	\$ 1,652
Gross margin	(1,148)	1,598	1,928	831
Net loss	(4,948)	(2,854)	(2,520)	(3,943)
Basic and diluted net loss per share	\$ (0.23)	\$ (0.13)	\$ (0.12)	\$ (0.18)
Shares used in computing basic and fully diluted net loss per share	21,493	21,551	21,897	21,831
2001:				
Total revenues	\$ 3,533	\$ 4,331	\$ 3,254	\$ 2,326
Gross margin	1,657	2,064	1,464	541
Net loss attributable to common stockholders before				
extraordinary item	(2,150)	(1,261)	(2,061)	(2,997)
Extraordinary item, net of income taxes	_	(672)		
Net loss attributable to common stockholders	(2,150)	(1,933)	(2,061)	(2,997)
Basic and diluted net loss per share attributable to common stockholders before extraordinary item	\$ (0.42)	\$ (0.09)	\$ (0.10)	\$ (0.14)
Extraordinary item, net of income taxes	_	(0.05)		
Basic and diluted net loss attributable to common stockholders per share	\$ (0.42)	\$ (0.14)	\$ (0.10)	\$ (0.14)
Shares used in computing basic and fully diluted net loss attributable to common stockholders per share	5,152	13,557	21,317	21,381

### Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure

On April 8, 2002, the Board of Directors of the Company, upon recommendation of the Company's Audit Committee, made a determination to no longer engage Arthur Andersen LLP ("Arthur Andersen") as the Company's independent public accountants and engaged PricewaterhouseCoopers LLP on April 10, 2002 to serve as the Company's independent public accountants for the fiscal year ended March 31, 2002.

Arthur Andersen's reports on the Company's consolidated financial statements for each of the fiscal years ended March 31, 2001 and 2000 did not contain an adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles.

During the fiscal years ended March 31, 2001 and 2000 and the subsequent interim period through April 10, 2002, there were no disagreements with Arthur Andersen on any matter of accounting principle or practices, financial statement disclosure, or auditing scope or procedure which, if not resolved to Arthur Andersen's satisfaction, would have caused them to make reference to the subject mater in connection with their report on the Company's consolidated financial statements for such years, and there were no reportable events as set forth in Item 304(a)(1)(v) of Regulation S-K.

### PART III

### Item 10. Directors and Executive Officers of the Registrant

The information required by this item (with respect to Directors) is incorporated by reference from the information under the caption "Election of Directors" contained in the Company's Proxy Statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for the Company's 2002 Annual Meeting of Stockholders to be held on August 20, 2002 (the "Proxy Statement").

Item 405 of Regulation S-K calls for disclosure of any known late filing or failure by an insider to file a report required by Section 16(a) of the Exchange Act. This disclosure is contained under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement and is incorporated herein by reference.

For information with respect to the executive officers of the Company, see "Executive Officers of the Registrant" at the end of Part I of this report.

### Item 11. Executive Compensation

The information required by this item is incorporated by reference from the information under the captions "Election of Directors — Director Compensation," "Executive Compensation," and "Election of Directors — Compensation Committee Interlocks and Insider Participation" contained in the Proxy Statement.

### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholders Matters

The information required by this item is incorporated by reference from the information under the caption "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" contained in the Proxy Statement.

### Item 13. Certain Relationships and Related Transactions

The information required by this item is incorporated by reference from the information contained under the captions "Certain Relationships and Related Party Transactions" contained in the Proxy Statement.

### PART IV

### Item 14. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

- (a) Documents filed as part of this report:
  - (1) Financial Statements

Reference is made to the Index to Consolidated Financial Statements of Tvia, Inc., under Item 8 of Part II hereof.

(2) Financial Statement Schedules

The following financial statement schedule of Tvia, Inc. is filed as part of this Form 10-K.

Schedule II — Valuation and Qualifying Accounts

All other financial statement schedules have been omitted because they are not applicable or not required or because the information is included elsewhere in the Consolidated Financial Statements or the Notes thereto.

(3) Exhibits

See Item 14(c) below. Each management contract or compensatory plan or arrangement required to be filed has been identified.

(b) Reports on Form 8-K.

On April 11, 2002, the Company filed a Current Report on Form 8-K reporting under Item 4 a change in the Company's certifying accountant.

(c) Exhibits

### Exhibit Number

### Description of Document

- 3(i).1 Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.3 to Amendment No. 5 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.4 to Amendment No. 3 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
  - 4.1 Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to Amendment No. 2 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
  - 4.2 Form of Amended and Restated Registration Rights Agreement dated as of April 3, 2000 (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
  - 4.3 Warrant to Purchase Stock issued December 31, 1997 to C.Y. Lee (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
  - Warrant to Purchase Stock issued April 30, 1999 to James Mah (incorporated by reference to Exhibit 4.4 to Company's Registration Statement on Form S-1 (File No. 333-34024)).
  - 4.5 Warrant to Purchase Stock issued June 21, 1999 to Far East National Bank (incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
  - 4.6 Warrant to Purchase Stock issued June 21, 1999 to Far East National Bank (incorporated by reference to Exhibit 4.6 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
  - 4.7 Warrant to Purchase Stock issued December 30, 1999 to Far East National Bank (incorporated by reference to Exhibit 4.7 to the Company's Registration Statement on Form S-1 (File No. 333-34024))

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### Description of Document

- 4.8 Warrant to Purchase Stock issued January 25,2000 to C.Y. Lee (incorporated by reference to Exhibit 4.8 to Amendment No. 2 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- Warrant to Purchase Stock issued January 25, 2000 to James Mah (incorporated by reference to Exhibit 4.9 to Amendment No. 2 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 4.10 Warrant to Purchase Stock issued July 27, 2000 to Wind River Systems, Inc. (incorporated by reference to Exhibit 4.10 to Amendment No. 7 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.1# Amended and Restated 1999 Stock Incentive Plan of Tvia, Inc. (incorporated by reference to Exhibit 10.1 to Amendment No. 1 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.2# Amended and Restated 2000 Stock Incentive Plan of Tvia, Inc.
- 10.3# Reserved
- 10.4# 2000 Employee Stock Purchase Plan of Tvia, Inc.
- 10.5# Form of Directors and Officers' Indemnification Agreement (incorporated by reference to Exhibit 10.4 to Amendment No. 3 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.6 TSMC Terms and Conditions dated November 15, 1999 (incorporated by reference to Exhibit 10.5 to Amendment No. 1 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.7 UMC Wafer Foundry Standard Terms and Conditions (incorporated by reference to Exhibit 10.6 to Amendment No. 1 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.8# Form of Executive Severance Agreement (incorporated by reference to Exhibit 10.9 to Amendment No. 2 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.9 Letter Agreement dated July 27, 2000 between the Company and Wind River Systems, Inc. (incorporated by reference to Exhibit 10.10 to Amendment No. 7 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.10† Audio Technology Licensing Agreement dated June 26, 1997 between T-Square Design, Inc. and Integraphics Systems, Inc. (incorporated by reference to Exhibit 10.11 to Amendment No. 10 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.11 Multi-Tenant Single-Building Modified-Net Lease dated October 27, 1995 between Koll/ Intereal Bay Area and Integraphics System, Inc. (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.12 First Amendment to Lease Agreement dated January 15, 1999 between Koll/Intereal Bay Area and IGS Technologies, Inc. (incorporated by reference to Exhibit 10.14 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.13 Second Amendment to Lease Agreement dated May 6, 1999 between Koll/Intereal Bay Area and IGS Technologies, Inc. (incorporated by reference to Exhibit 10.15 to the Company's Registration Statement on Form S-1 (File No. 333-34024)).
- 10.14# Consulting Confidentiality Agreement dated January 29, 2001 between the Company and R. David Dicioccio (incorporated by reference to Exhibit 10.16 to the Company's Annual Report on Form 10-K for the fiscal year ended March 31, 2001).
- 10.15# Promissory Note entered by and between the Company and Jack Guedj dated April 11, 2001 (incorporated by reference to Exhibit 10.17 to the Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2001).

Exhibit Number	Description of Document
10.16#	Option Agreement between the Company and Eli Porat dated November 30, 2001 (incorporated by reference to Exhibit 10.18 to the Company's Quarterly Report on Form 10-Q for the period ended December 31, 2001).
10.17#	Option agreement between the Company and Eli Porat dated November 30, 2001 (incorporated by reference to Exhibit 10.18 to the Company's Quarterly Report on Form 10-Q for the period ended December 31, 2001).
10.18#	Consulting Confidentiality Agreement dated February 19, 2002 between the Company and R. David Dicioccio.
10.19†	Technology License Agreement by and between the Company and Oak Technology, Inc. dated December 29, 2000.
10.20†	Addendum to Technology License Agreement by and between the Company and Oak Technology, Inc. dated April 25, 2001.
10.21#	Agreement and Release of Claims by and between the Company and Jack Guedj dated January 31, 2002.
21.1	Subsidiaries of the Company.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants.
23.2	Consent of Arthur Andersen LLP, Independent Public Accountants.
24.1	Power of Attorney (see page 62 of this Form 10-K).

<sup>#</sup> Indicates management contact or compensatory plan or arrangement.

See Item 14(a)(1) and (a)(2) above.

<sup>†</sup> Confidential treatment has been requested or granted with respect to certain portions of these agreements.

<sup>(</sup>d) Financial Statement Schedules.

### REPORT OF INDEPENDENT ACCOUNTANTS ON FINANCIAL STATEMENT SCHEDULE

To the Board of Directors and Stockholders of Tvia, Inc.:

Our audit of the consolidated financial statements of Tvia, Inc. referred to in our report dated May 7, 2002 also included an audit of the financial statement schedule listed in Item 14(a)(2) of this Form 10-K. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PRICEWATERHOUSECOOPERS LLP PricewaterhouseCoopers LLP

San Jose, California May 7, 2002

### TVIA, INC. AND SUBSIDIARY SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions	Balance at End of Period
		(In tho	usands)	
Year Ended March 31, 2002				
Allowance for doubtful accounts	\$439	\$ 100	\$ 427	\$ 112
Inventory reserve	\$834	\$2,100	\$1,231	\$1,703
Allowance for sales returns	\$ 44	\$ —	\$ 28	\$ 16
Year Ended March 31, 2001				
Allowance for doubtful accounts	\$ 55	\$ 428	\$ 44	\$ 439
Inventory reserve	\$120	\$ 714	\$ <b>—</b>	\$ 834
Allowance for sales returns	<b>\$</b> —	\$ 344	\$ 300	\$ 44
Year Ended March 31, 2000				
Allowance for doubtful accounts	\$ 5	\$ 50	\$ —	\$ 55
Inventory reserve	\$ <b>—</b>	\$ 120	\$ —	\$ 120
Allowance for sales returns	\$ —	\$ <b>—</b>	\$ —	\$ <b>—</b>

### SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TVIA, INC.

By /s/ ELI PORAT

ELI PORAT

President and Chief Executive Officer

Date: June 25, 2002

### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Eli Porat and Michael Hoberg, and each of them, his true and lawful attorneys-infact, each with full power of substitution, for him or her in any and all capacities, to sign any amendments to this report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

	_	
<u>Name</u>	Title	Date
/s/ Eli Porat	President and Chief Executive Officer	June 25, 2002
Eli Porat	(Principal Executive Officer)	
/s/ Michael Hoberg	Vice President of Finance and Chief	June 25, 2002
Michael Hoberg	Financial Officer (Principal Financial and Accounting Officer)	
/s/ Kenny Liu	Chairman of the Board	June 24, 2002
Kenny Liu		
/s/ Steven Cheng	Director	June 27, 2002
Steven Cheng		
/s/ James Bunker	Director	June 25, 2002
James Bunker		
/s/ Mark Mangiola	Director	June 24, 2002
Mark Mangiola		
/s/ R. David Dicioccio	Director	June 26, 2002
R. David Dicioccio		

### **Tvia Corporate information**

### **Board of Directors**

Kenny Liu Chairman of the Board, Tvia, Inc.

Eli Porat President and Chief Executive Officer, Tvia, Inc.

James Bunker Chairman of the Board, Channelogics, Inc.

Steven Cheng President, Hontung Venture Capital Corporation

R. David Dicioccio Managing Member, RDD Associates, LLC

Mark Mangiola Venture Partner, Canaan Ventures

### Officers

Kenny Liu Chairman of the Board

Eli Porat President and Chief Executive Officer

Michael Hoberg Vice President, Finance and Chief Financial Officer

J.C. Chung Kuo Chief Technical Officer Bo Liu Vice President, Software Development

James Tao Vice President, Worldwide Marketing

Yee Wong Vice President, Operations

### **Corporate Headquarters**

Tvia, Inc. 4001 Burton Drive Santa Clara, CA 95054 408.982.8588 phone 408.982.8591 fax www.tvia.com

### **Additional Locations**

Hefei New & High Technology Industry Development Zone 669 Chang Jiang Rd., W, hefei, Anhui P.R. China 230088

7F-3, No. 164 Sec., 2, Tunhwa S. Rd. Taipei, Taiwan

10 Whistler Grove College Sandhurst Berkshire, United Kingdom

CyberPro™ is our trademark

### Stock Data

Nasdaq National Market Symbol: TVIA

### **Annual Meeting**

The Annual Meeting will be held at 1:00 pm on August 20, 2002 Corporate Headquarters 4001 Burton Drive Santa Clara, California 95054

### **Stock Transfer Agent and Registrar**

Mellon Investor Services LLC 85 Challenger Road Ridgefield, New Jersey 07660 800.647.7423 phone +1.201.296.8660 international

### Legal Counsel

Pillsbury Winthrop LLP 2550 Hanover Street Palo Alto, California 94304

### **Independent Accountants**

PricewaterhouseCoopers, LLP Ten Almaden Blvd., Suite 1600 San Jose, California 95113

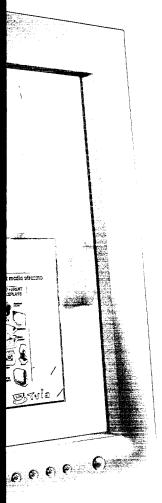
### Note on Forward-looking Information

Except for the historical information contained herein, the matters set forth in this Annual Report, including statements as to the availability, features, benefits and anticipated design wins of Tvia's current and future products, use of Tvia's strengths to further develop the company and its business, our new management philosophy inspiring greater achievements and leadership, and intended markets and geographic regions, are forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. When used in this Annual Report, the word, "expects," "anticipates," "believes," "estimates," "plans," and similar expressions are intended to identify forward-looking statements. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially, including, but not limited to, slower than anticipated emergence of the interactive television market, Tvia's ability to develop, introduce and sell new products, possible market growth and demand for products, the impact of technological advances and competitive products and other risks detailed in the section entitled, "Factors That May Affect Results" and from time to time in Tvia's SEC reports its Annual Report on Form 10-K for the year ended March 31, 2002. These forward-looking statements are based upon information available to Tvia as of the date of this annual report, and Tvia assumes no obligation to update or revise any forward-looking statements.



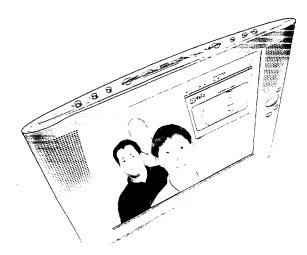
### Tvia

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Estvia





Headquarters, USA

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Design Center, China

Hefei New and HighTechnology Industry Development Zone 669 ChangJiang Rd.W., Hefei, Anhui P.R. China 2388 Tel: 0551-5314326(5319000) Fax: 0551-5314517